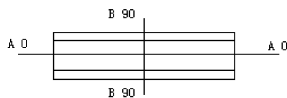
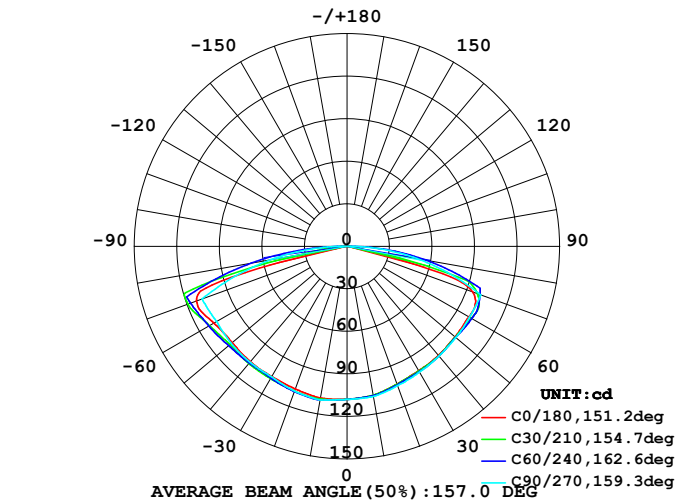


LUMINAIRE PHOTOMETRIC TEST REPORT

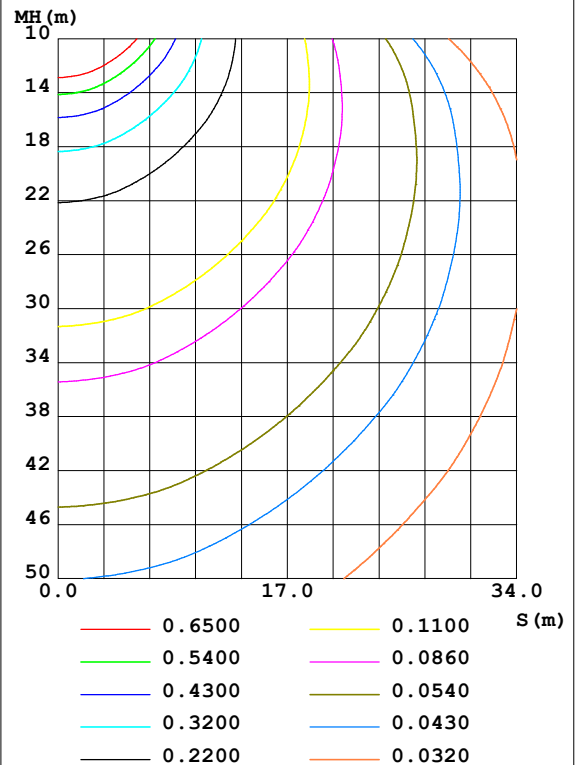
Test:U:0V I:0A P:0W PF:0 Lamp Flux:541.221x1 lm		
NAME: NEMD2-W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2019110705
MFR.: JEWOO	SUR.:0.037	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	NEMD2-W	Imax(cd)	122.6	S/MH(C0/180)	1.51
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.52
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	541.22	η UP,DN(C0-180)	0.0,48.7
NOMINAL FLUX(lm)	541.221	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,51.3
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.75
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.75

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2019-11-07

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:13.669m [K=1.0000]
 Remarks: DC

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
5	107.4	107.3	107.7	107.9	108.3	108.7	108.7	108.0	0- 5	2.582	2.582	0.48,0.48
10	106.7	106.6	107.6	108.0	108.6	109.6	110.1	108.1	5- 10	7.736	10.32	1.91,1.91
15	105.0	105.3	106.1	107.5	107.8	109.8	109.4	107.3	10- 15	12.79	23.10	4.27,4.27
20	103.4	103.7	104.6	106.4	107.0	108.9	108.7	106.1	15- 20	17.58	40.68	7.52,7.52
25	102.1	102.4	103.5	105.7	106.4	108.2	107.5	105.3	20- 25	22.15	62.83	11.6,11.6
30	101.2	101.8	102.4	105.0	106.2	107.7	106.3	104.7	25- 30	26.52	89.35	16.5,16.5
35	101.0	101.6	101.7	104.5	106.3	107.5	106.5	104.4	30- 35	30.71	120.1	22.2,22.2
40	100.3	101.5	101.0	103.9	106.2	107.7	106.7	104.5	35- 40	34.71	154.8	28.6,28.6
45	99.82	100.7	100.4	103.3	106.0	108.6	106.8	104.1	40- 45	38.40	193.2	35.7,35.7
50	99.42	100.3	100.2	102.8	105.8	109.8	106.6	103.5	45- 50	41.81	235.0	43.4,43.4
55	99.24	100.4	100.0	103.4	106.3	111.0	106.4	103.6	50- 55	45.11	280.1	51.8,51.8
60	99.36	102.1	99.83	106.5	108.5	113.7	106.2	106.0	55- 60	48.36	328.4	60.7,60.7
65	99.59	103.9	100.1	110.4	112.0	117.6	107.5	108.9	60- 65	51.71	380.2	70.2,70.2
70	94.37	99.74	100.4	110.9	113.1	119.4	108.8	107.7	65- 70	54.57	434.7	80.3,80.3
75	51.68	84.64	75.29	104.1	84.54	114.9	81.65	98.21	70- 75	52.02	486.7	89.9,89.9
80	3.567	56.19	50.22	71.20	4.454	78.96	54.53	66.14	75- 80	33.04	519.8	96,96
85	1.107	27.72	25.16	35.49	1.051	39.44	27.42	32.73	80- 85	16.11	535.9	99,99
90	0.0966	0.2039	0.0966	0.0537	0.0625	0.2682	0.3004	0.3219	85- 90	5.329	541.2	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

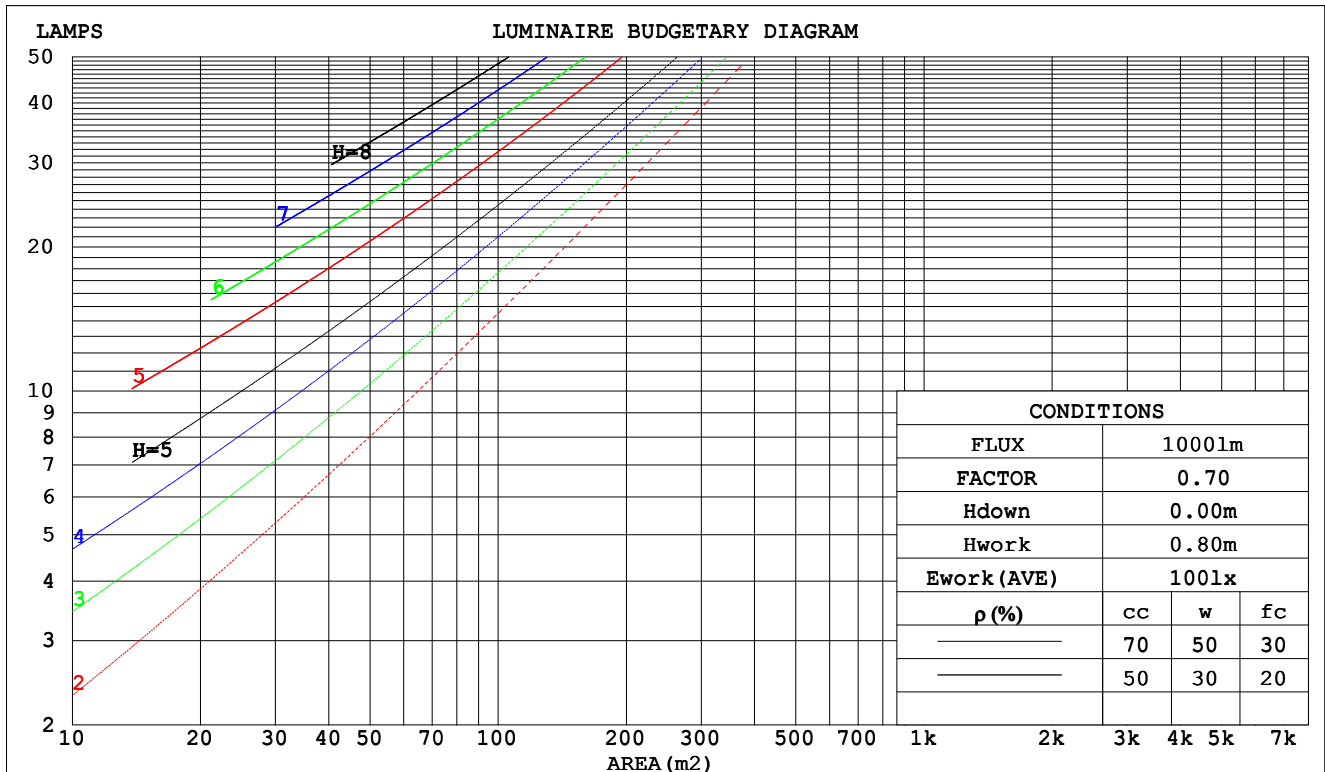
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2019-11-07

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:13.669m [K=1.0000]
 Remarks: DC

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:0V I:0A P:0W PF:0 Lamp Flux:541.221x1 lm		
NAME: NEMD2-W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2019110705
MFR.: JEWOO	SUR.:0.037	PROTECTION ANGLE:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	.99	.94	.89	.97	.92	.87	.92	.88	.84	.88	.85	.82	.85	.82	.79	.77
2.0	.83	.75	.67	.81	.73	.67	.77	.71	.65	.74	.68	.63	.71	.66	.62	.59
3.0	.71	.61	.53	.69	.60	.52	.66	.58	.51	.63	.56	.50	.60	.54	.49	.47
4.0	.61	.51	.43	.60	.50	.43	.57	.49	.42	.55	.47	.41	.52	.46	.41	.38
5.0	.54	.43	.36	.52	.43	.35	.50	.42	.35	.48	.40	.34	.46	.39	.34	.32
6.0	.48	.38	.30	.47	.37	.30	.45	.36	.30	.43	.35	.29	.41	.34	.29	.27
7.0	.43	.33	.26	.42	.33	.26	.40	.32	.26	.39	.31	.25	.37	.30	.25	.23
8.0	.39	.29	.23	.38	.29	.23	.37	.28	.23	.35	.28	.22	.34	.27	.22	.20
9.0	.35	.26	.20	.35	.26	.20	.33	.26	.20	.32	.25	.20	.31	.25	.20	.18
10.0	.32	.24	.18	.32	.24	.18	.31	.23	.18	.30	.23	.18	.29	.22	.18	.16



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2019-11-07

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:13.669m [K=1.0000]
 Remarks: DC

WEC AND CCEC

Test:U:0V I:0A P:0W PF:0 Lamp Flux:541.221x1 lm								
NAME: NEMD2-W				TYPE:			WEIGHT:	
SPEC.:				DIM.:			SERIAL No.:2019110705	
MFR.: JEWOO				SUR.:0.037			PROTECTION ANGLE:	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.399	.227	.072	.391	.223	.071	.378	.217	.069	.365	.211	.068	.353	.205	.066	
2.0	.362	.199	.061	.356	.196	.060	.343	.191	.059	.332	.186	.058	.321	.182	.057	
3.0	.325	.173	.052	.320	.171	.052	.308	.167	.051	.298	.163	.050	.289	.160	.049	
4.0	.293	.152	.045	.288	.151	.044	.278	.147	.044	.269	.144	.044	.260	.141	.043	
5.0	.265	.135	.039	.261	.134	.039	.252	.131	.039	.244	.129	.038	.236	.126	.038	
6.0	.242	.121	.035	.238	.120	.035	.230	.118	.034	.223	.116	.034	.216	.114	.034	
7.0	.222	.110	.031	.218	.109	.031	.211	.107	.031	.205	.105	.031	.199	.103	.030	
8.0	.205	.100	.028	.202	.099	.028	.196	.098	.028	.190	.096	.028	.184	.095	.028	
9.0	.190	.092	.026	.187	.091	.026	.182	.090	.025	.177	.089	.025	.172	.087	.025	
10.0	.177	.085	.024	.175	.084	.024	.170	.083	.023	.165	.082	.023	.161	.081	.023	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.186	.155	.127	.160	.133	.110	.109	.092	.076	.063	.053	.044	.020	.017	.014	
2.0	.182	.132	.089	.156	.113	.077	.107	.078	.054	.061	.046	.032	.020	.015	.010	
3.0	.175	.115	.066	.150	.099	.058	.103	.069	.040	.060	.040	.024	.019	.013	.008	
4.0	.168	.102	.052	.144	.088	.045	.099	.061	.032	.057	.036	.019	.018	.012	.006	
5.0	.160	.092	.042	.137	.080	.037	.094	.056	.026	.055	.033	.015	.018	.011	.005	
6.0	.152	.084	.035	.130	.073	.031	.090	.051	.022	.052	.030	.013	.017	.010	.004	
7.0	.144	.077	.030	.124	.067	.026	.086	.047	.019	.050	.028	.011	.016	.009	.004	
8.0	.137	.071	.026	.118	.062	.023	.082	.043	.016	.047	.026	.010	.015	.008	.003	
9.0	.130	.066	.023	.112	.058	.020	.078	.040	.014	.045	.024	.009	.015	.008	.003	
10.0	.124	.062	.021	.107	.054	.018	.074	.038	.013	.043	.022	.008	.014	.007	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2019-11-07

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:13.669m [K=1.0000]
 Remarks: DC

UGR(Unified Glare Rating) Table

Test:U:0V I:0A P:0W PF:0 Lamp Flux:541.22lx1 lm											
NAME: NEMD2-W					TYPE:			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:2019110705			
MFR.: JEWOO					SUR.:0.037			PROTECTION ANGLE:			
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimensions		Viewed crosswise					Viewed endwise				
x = 2H y = 2H		31.1	32.8	31.4	33.1	33.3	31.1	32.8	31.4	33.1	33.3
3H		34.2	35.8	34.5	36.1	36.3	34.3	35.9	34.6	36.2	36.4
4H		35.2	36.7	35.5	37.0	37.3	35.6	37.1	35.9	37.4	37.7
6H		35.1	36.6	35.5	36.9	37.2	36.5	38.0	36.8	38.3	38.6
8H		35.1	36.5	35.4	36.8	37.1	36.8	38.3	37.2	38.6	38.9
12H		35.0	36.4	35.4	36.7	37.0	37.1	38.5	37.4	38.8	39.1
4H	2H	32.2	33.8	32.6	34.1	34.4	32.2	33.8	32.6	34.1	34.4
	3H	35.4	36.8	35.8	37.1	37.5	35.6	37.0	35.9	37.3	37.6
	4H	36.5	37.8	36.9	38.1	38.4	37.0	38.3	37.4	38.6	38.9
	6H	36.5	37.7	36.9	38.0	38.4	38.0	39.2	38.4	39.5	39.9
	8H	36.4	37.5	36.9	37.9	38.3	38.4	39.5	38.8	39.9	40.2
	12H	36.4	37.4	36.8	37.8	38.2	38.7	39.7	39.1	40.1	40.5
8H	4H	37.0	38.1	37.5	38.5	38.9	37.5	38.6	37.9	39.0	39.4
	6H	37.1	38.1	37.6	38.5	38.9	38.8	39.7	39.2	40.1	40.6
	8H	37.1	37.9	37.6	38.4	38.8	39.3	40.1	39.8	40.6	41.0
	12H	37.1	37.8	37.6	38.3	38.7	39.7	40.4	40.2	40.9	41.4
12H	4H	37.1	38.1	37.6	38.5	38.9	37.5	38.5	37.9	38.9	39.3
	6H	37.4	38.2	37.8	38.6	39.1	38.9	39.7	39.3	40.1	40.6
	8H	37.4	38.1	37.9	38.6	39.0	39.5	40.2	40.0	40.6	41.1
Variations with the observer position at spacings:											
S = 1.0H		+ 0.0 / - 0.1					+ 0.1 / - 0.1				
1.5H		+ 0.1 / - 0.3					+ 0.2 / - 0.3				
2.0H		+ 0.3 / - 0.5					+ 0.1 / - 0.3				

CIE Pub.117 Corrected 541.2 lm Total Lamp Luminous Flux. (8log(F/F0) = -2.1)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2019-11-07

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:13.669m [K=1.0000]
 Remarks: DC

UTILIZATION FACTORS TABLE

Test:U:0V I:0A P:0W PF:0 Lamp Flux:541.221x1 lm		
NAME: NEMD2-W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2019110705
MFR.: JEWOO	SUR.:0.037	PROTECTION ANGLE:

REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	49	36	28	48	36	28	47	35	28	21
0.80	59	45	36	57	44	36	55	44	36	28
1.00	67	53	44	65	53	44	63	55	44	35
1.25	74	61	52	72	60	52	69	59	51	42
1.50	79	67	58	78	66	58	74	64	57	48
2.00	88	77	68	85	75	68	82	73	66	57
2.50	93	83	75	90	81	74	86	78	72	63
3.00	97	88	81	94	86	80	90	83	78	68
4.00	102	95	89	99	93	87	95	89	85	75
5.00	105	99	94	103	97	92	98	93	89	79
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2019-11-07

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:13.669m [K=1.0000]
 Remarks: DC

ISOCANDELA DIAGRAM

Test:U:0V I:0A P:0W PF:0 Lamp Flux:541.221x1 lm		
NAME: NEMD2-W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2019110705
MFR.: JEWOO	SUR.:0.037	PROTECTION ANGLE:

Conical surface Flux(90deg):

193.16 lm

%lum = 35.7%

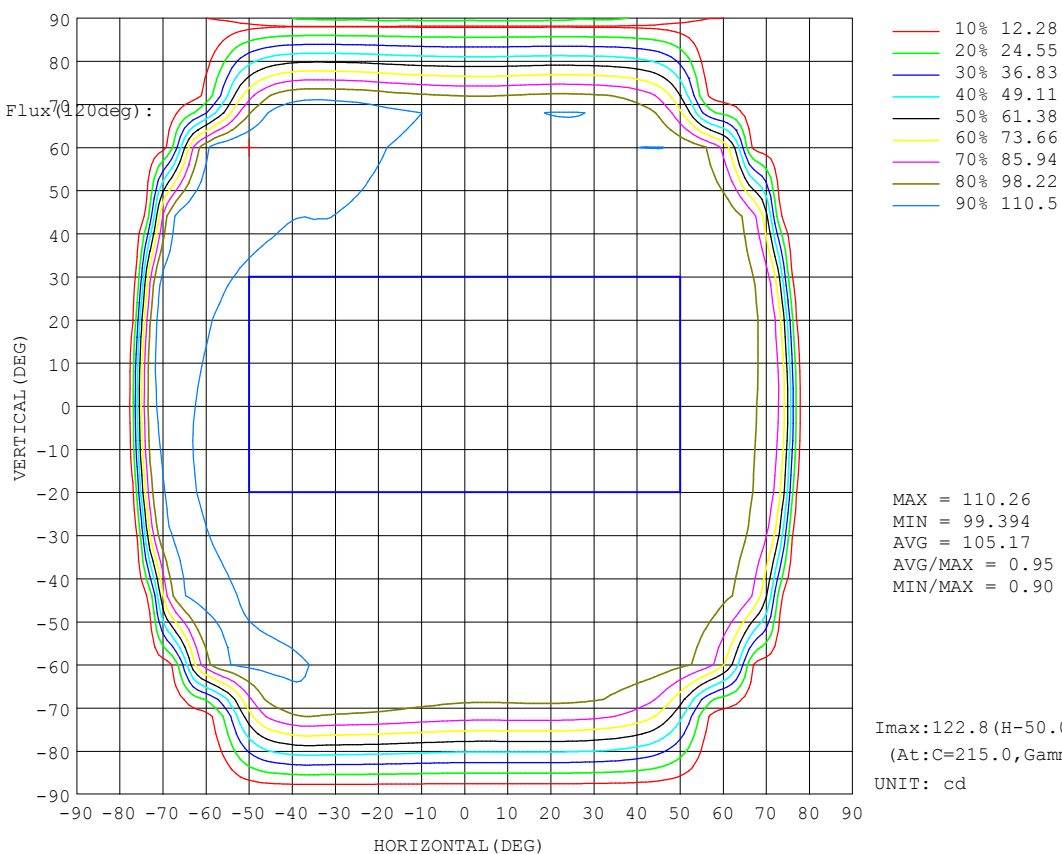
%lamp = 35.7%

Conical surface Flux(70deg):

328.44 lm

%lum = 60.7%

%lamp = 60.7%

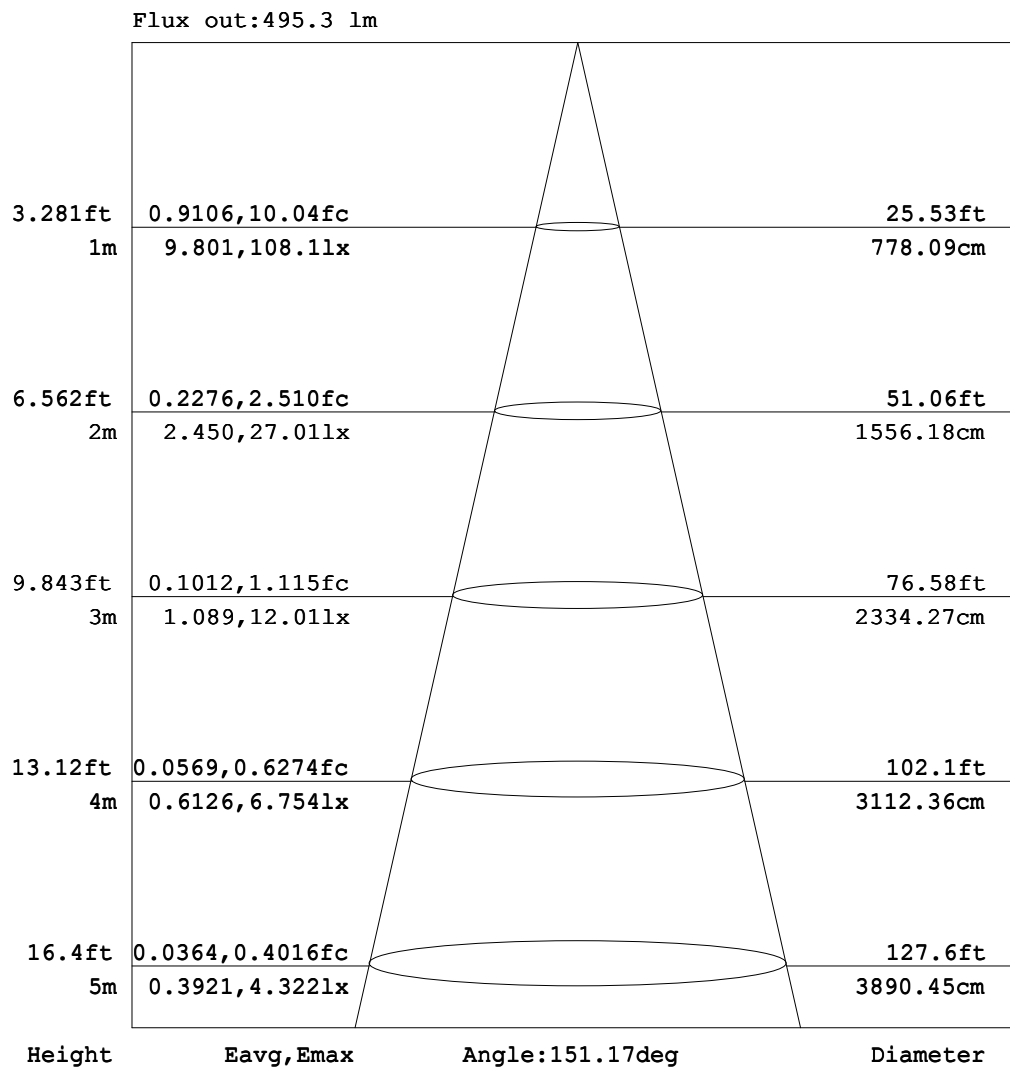


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:WLM
Test Date:2019-11-07

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
Humidity:65.0%
Test Distance:13.669m [K=1.0000]
Remarks: DC

AAI Figure

Test:U:0V I:0A P:0W PF:0 Lamp Flux:541.221x1 lm		
NAME: NEMD2-W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2019110705
MFR.: JEWOO	SUR.:0.037	PROTECTION ANGLE:



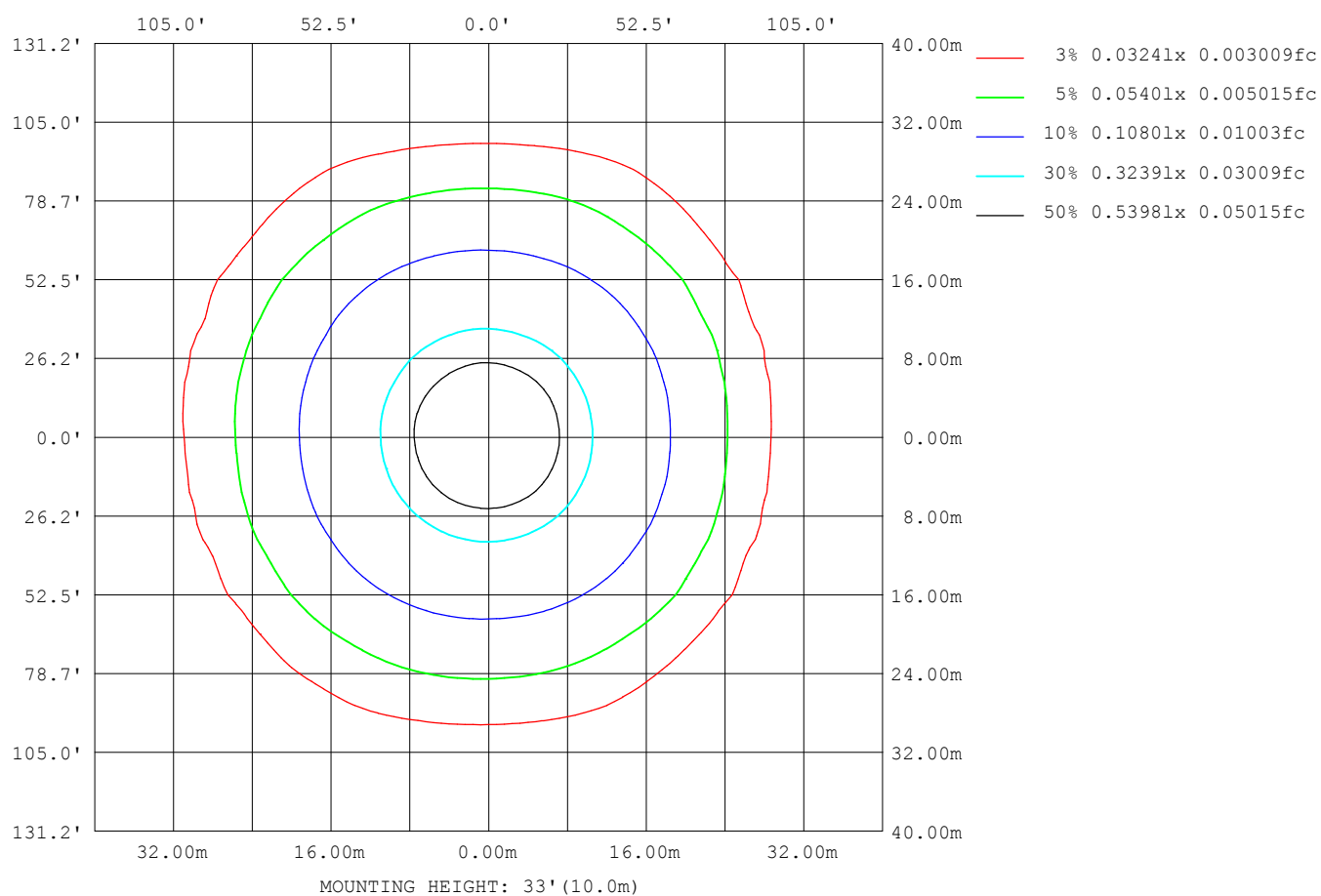
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:WLM
Test Date:2019-11-07

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
Humidity:65.0%
Test Distance:13.669m [K=1.0000]
Remarks: DC

ISOLUX DIAGRAM

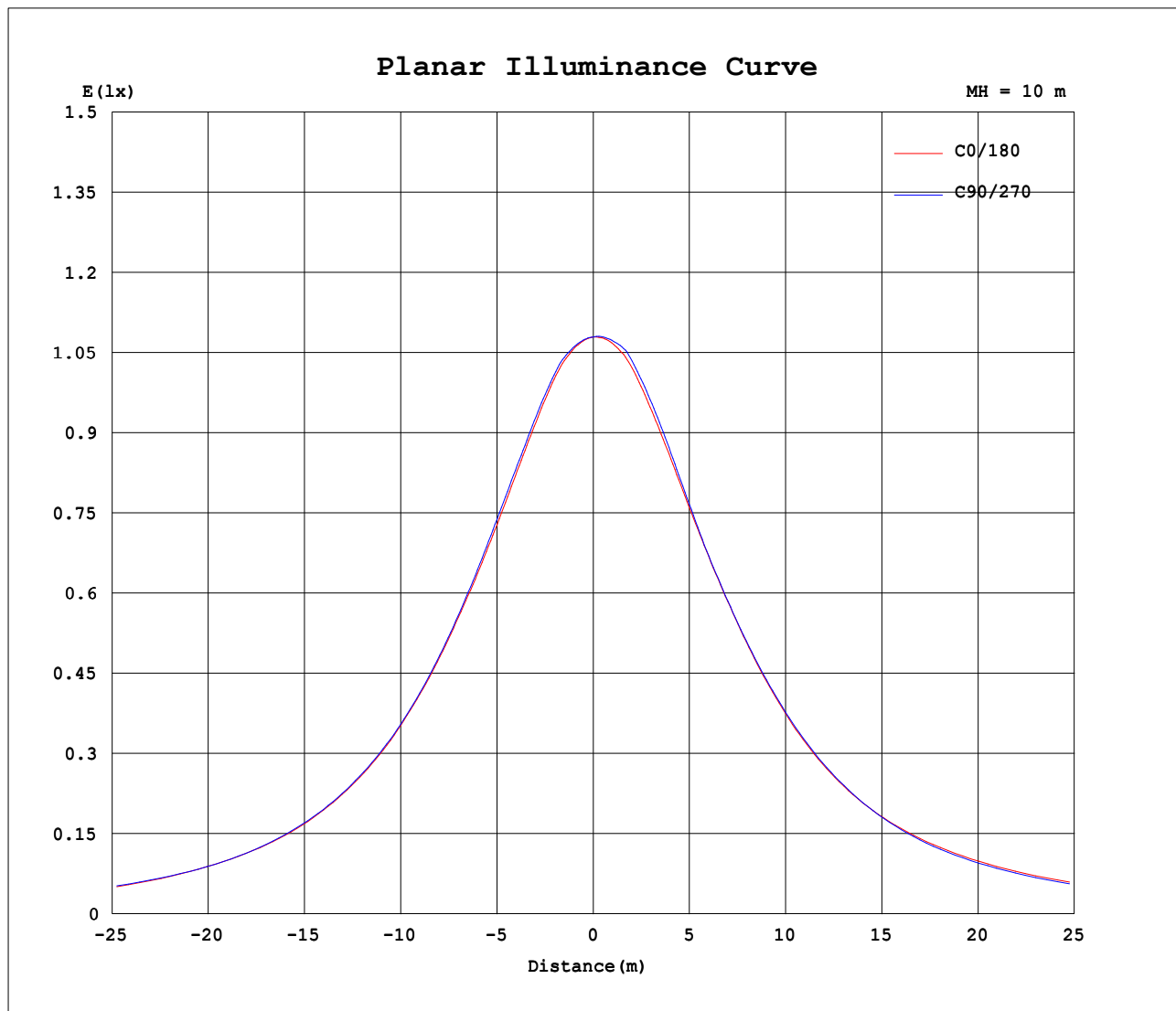
Test:U:0V I:0A P:0W PF:0 Lamp Flux:541.221x1 lm		
NAME: NEMD2-W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2019110705
MFR.: JEWOO	SUR.:0.037	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:WLM
Test Date:2019-11-07

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
Humidity:65.0%
Test Distance:13.669m [K=1.0000]
Remarks: DC

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: WLM
Test Date: 2019-11-07

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.287
Humidity: 65.0%
Test Distance: 13.669m [K=1.0000]
Remarks: DC

UNIT: cd

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
Humidity:65.0%
Test Distance:13.669m [K=1.0000]
Remarks: DC

```

UNIT: cd

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
Humidity:65.0%
Test Distance:13.669m [K=1.0000]
Remarks: DC

```

UNIT: cd

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
Humidity:65.0%
Test Distance:13.669m [K=1.0000]
Remarks: DC

```

Model	Model	Model
Model 1	Model 2	Model 3

UNIT: cd

[illegible]

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
Humidity:65.0%
Test Distance:13.669m [K=1.0000]
Remarks: DC

```