

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P998561

Luminaire Tested: SA2XXDIP-B485D725UB27-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P998561
REPORT IS A COMBINATION OF REPORTS P984304 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B485D725UB27-4F0-XX-W2A-F
Description: Define 2 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

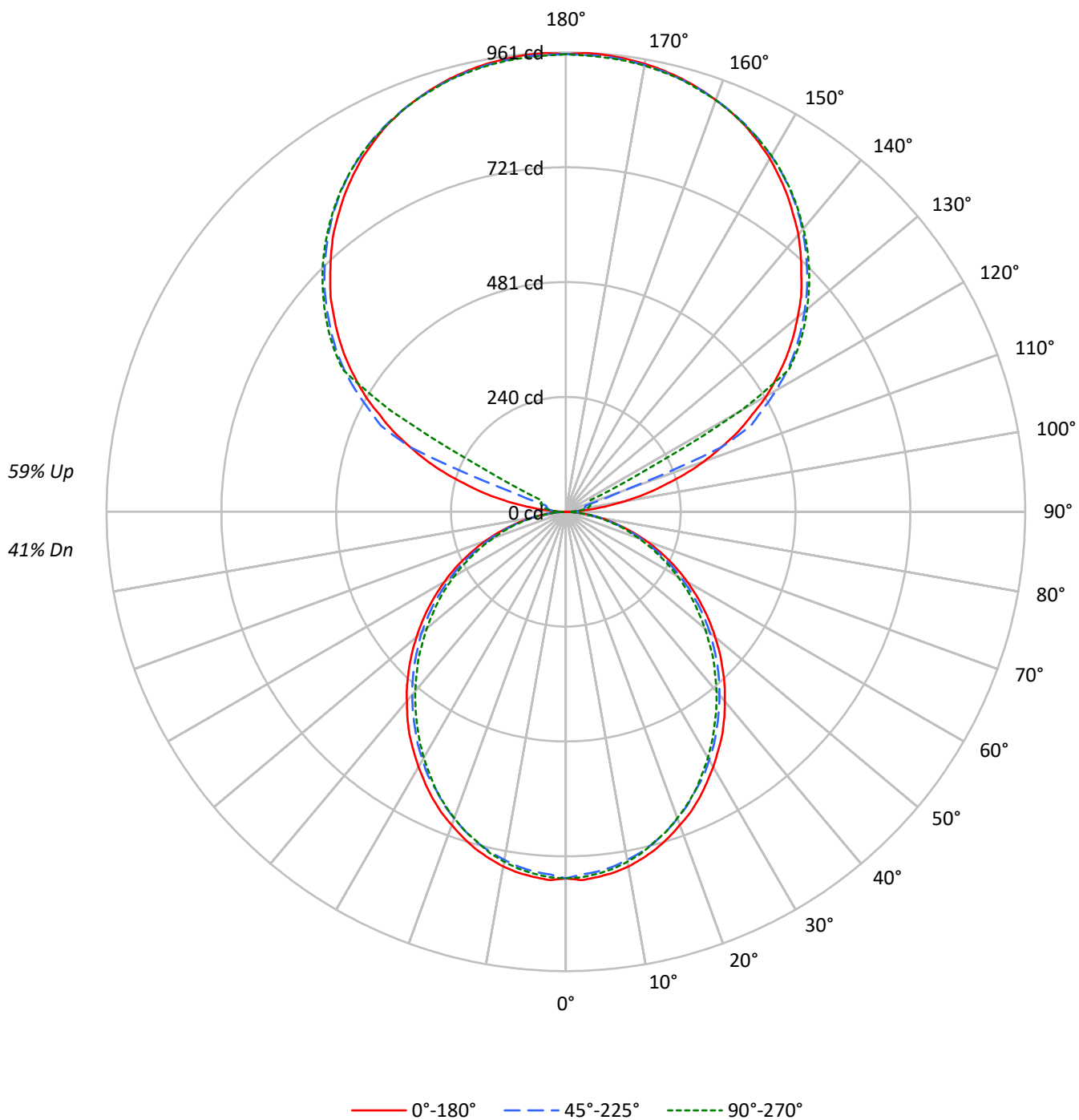
Lumens per Lamp: N/A
Luminaire Lumens: 4759.0 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 45.1
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48
1	96	92	88	84	87	84	80	77	69	66	64	55	53	52	42	41	40
2	87	80	74	69	79	73	68	63	60	56	53	48	46	43	37	36	34
3	80	70	63	57	72	64	58	53	53	48	45	43	39	37	33	31	29
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	29	27	25
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22
6	61	50	42	36	56	45	38	33	38	33	29	31	27	24	24	21	19
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17
8	53	40	33	28	48	37	31	26	31	26	22	26	22	19	20	17	15
9	49	37	30	25	45	34	27	23	29	23	20	23	20	17	19	16	14
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12139	12139	12139
5°	12159	11571	11488
10°	12060	11044	10825
15°	11883	10512	10125
20°	11644	9934	9464
25°	11407	9330	8802
30°	11106	8764	8109
35°	10825	8165	7428
40°	10476	7574	6783
45°	10129	6989	6152
50°	9752	6394	5497
55°	9353	5755	4877
60°	8906	5066	4232
65°	8415	4365	3554
70°	7791	3597	2869
75°	6931	2773	2216
80°	5884	1884	1425
85°	4266	878	607

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10129 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.2	1.5
10°-20°	203.1	4.3
20°-30°	298.4	6.3
30°-40°	346.6	7.3
40°-50°	346.2	7.3
50°-60°	301.9	6.3
60°-70°	223.1	4.7
70°-80°	126.3	2.7
80°-90°	35.0	0.7
90°-100°	31.6	0.7
100°-110°	117.7	2.5
110°-120°	312.1	6.6
120°-130°	517.6	10.9
130°-140°	549.8	11.6
140°-150°	511.0	10.7
150°-160°	410.8	8.6
160°-170°	264.7	5.6
170°-180°	91.1	1.9
0°-30°	573.7	12.1
0°-40°	920.3	19.3
0°-60°	1568.3	33.0
0°-90°	1952.7	41.0
90°-120°	461.3	9.7
90°-150°	2039.7	42.9
90°-180°	2806.0	59.0
0°-180°	4759.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	767	767	767	767	767	
5°	767	764	756	762	760	73
15°	730	726	716	719	715	206
25°	661	655	642	644	642	304
35°	570	563	551	546	543	356
45°	464	459	448	440	436	358
55°	351	347	338	329	325	314
65°	237	232	225	218	215	234
75°	124	122	119	114	116	132
85°	30	30	29	26	26	34
90°	1	8	14	17	19	4
95°	45	22	27	30	30	53
105°	211	231	42	50	53	225
115°	398	410	427	107	57	392
125°	563	572	585	590	592	502
135°	697	708	714	721	720	538
145°	808	808	819	824	821	506
155°	890	884	892	896	891	410
165°	938	934	936	941	936	265
175°	959	954	956	961	954	91
180°	957	957	957	957	957	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	766.9	766.9	766.9	766.9	766.9
2.5°	771.3	767.6	759.5	766.9	765.4
5°	766.9	763.9	755.8	761.7	760.2
7.5°	761.7	757.3	749.2	755.1	753.6
10°	753.6	748.4	739.6	745.5	743.3
12.5°	742.5	738.1	729.2	732.9	731.5
15°	730.0	725.6	716.0	718.9	715.2
17.5°	714.5	710.1	700.5	704.2	700.5
20°	697.5	693.1	682.8	685.0	682.1
22.5°	680.6	673.9	664.4	664.4	662.9
25°	660.7	654.8	642.2	643.7	642.2
27.5°	638.6	633.4	623.8	621.6	617.9
30°	616.4	610.5	599.5	597.3	594.3
32.5°	592.8	588.4	576.6	572.2	569.2
35°	570.0	562.6	550.8	546.4	542.7
37.5°	544.2	537.5	525.7	520.6	516.9
40°	517.6	511.7	499.9	493.3	490.3
42.5°	491.8	485.9	474.1	466.7	462.3
45°	463.8	458.6	447.6	439.5	436.5
47.5°	436.5	431.4	419.6	411.4	407.0
50°	407.8	404.1	393.8	383.4	379.7
52.5°	379.7	374.6	365.0	356.9	351.7
55°	351.0	346.6	337.7	328.9	325.2
57.5°	322.2	318.5	309.0	300.1	297.2
60°	293.5	290.5	280.2	272.1	269.9
62.5°	265.4	260.3	252.9	245.5	242.6
65°	236.7	232.3	224.9	218.3	214.6
67.5°	207.2	203.5	196.9	191.7	188.8
70°	179.9	177.0	170.3	165.2	162.2
72.5°	151.9	148.9	145.3	140.1	137.9
75°	123.9	122.4	118.7	114.3	115.8
77.5°	98.8	95.9	94.4	92.2	90.0
80°	73.7	73.0	71.5	69.3	67.8
82.5°	50.1	50.1	49.4	46.5	46.5
85°	30.2	29.5	28.8	26.5	25.8
87.5°	13.3	11.8	10.3	8.1	7.4
90°	0.7	8.3	13.9	17.3	18.7
92.5°	17.3	14.5	16.6	18.0	18.7
95°	45.0	22.2	27.0	30.5	29.8
97.5°	81.0	24.2	35.3	37.4	38.1
100°	122.6	27.7	39.5	45.0	46.4
102.5°	168.3	166.9	40.9	48.5	50.6
105°	210.6	231.3	42.3	49.9	52.6
107.5°	259.7	277.1	43.6	51.3	54.0
110°	306.8	321.4	121.2	51.9	54.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	351.2	363.6	351.9	53.3	55.4
115°	398.3	410.1	427.4	106.7	56.8
117.5°	439.1	453.0	464.8	365.7	184.2
120°	484.9	495.2	507.7	516.0	422.5
122.5°	523.6	534.7	548.6	552.7	553.4
125°	563.1	572.1	585.3	590.1	592.2
127.5°	599.1	608.8	619.2	626.2	626.9
130°	633.1	644.2	651.8	659.4	658.7
132.5°	667.7	676.7	684.3	690.6	689.9
135°	696.8	707.9	714.1	721.1	719.7
137.5°	727.3	735.6	742.5	749.5	747.4
140°	757.1	762.6	770.2	776.5	773.0
142.5°	782.0	786.9	795.9	801.4	797.9
145°	808.3	807.6	819.4	824.3	820.8
147.5°	831.2	829.1	840.9	844.3	841.6
150°	853.3	848.5	859.6	863.7	860.3
152.5°	872.1	866.5	876.9	881.1	876.2
155°	890.1	883.8	892.1	896.3	890.8
157.5°	904.6	899.1	905.3	910.1	904.6
160°	917.1	912.9	917.1	921.2	916.4
162.5°	928.2	924.0	927.5	932.3	926.1
165°	937.9	933.7	935.8	940.6	935.8
167.5°	945.5	941.3	943.4	948.2	942.0
170°	951.7	947.6	948.9	953.8	947.6
172.5°	955.9	951.7	953.1	957.9	951.7
175°	959.3	954.5	955.9	960.7	953.8
177.5°	960.7	955.9	956.6	961.4	955.2
180°	957.2	957.2	957.2	957.2	957.2

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference 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	13.02	13.81	14.05	14.84	16.24	13.80	14.59	14.83	15.63	17.02
	3H	14.35	15.06	15.39	16.10	17.52	15.42	16.13	16.46	17.17	18.59
	4H	14.75	15.42	15.80	16.47	17.89	16.01	16.68	17.06	17.73	19.15
	6H	14.97	15.58	16.03	16.64	18.07	16.41	17.03	17.47	18.08	19.51
	8H	15.00	15.58	16.06	16.65	18.08	16.52	17.10	17.58	18.17	19.60
	12H	14.98	15.54	16.06	16.60	18.06	16.56	17.12	17.63	18.18	19.63
4H	2H	13.48	14.15	14.54	15.20	16.62	14.12	14.79	15.18	15.84	17.26
	3H	14.99	15.55	16.06	16.62	18.06	15.90	16.45	16.96	17.53	18.96
	4H	15.49	16.00	16.57	17.07	18.53	16.57	17.09	17.65	18.15	19.61
	6H	15.79	16.23	16.87	17.32	18.77	17.07	17.51	18.15	18.60	20.05
	8H	15.85	16.26	16.93	17.34	18.80	17.21	17.62	18.29	18.70	20.17
	12H	15.84	16.21	16.94	17.31	18.78	17.27	17.64	18.37	18.73	20.20
8H	4H	15.66	16.07	16.74	17.15	18.62	16.65	17.06	17.74	18.15	19.61
	6H	16.04	16.38	17.15	17.51	18.97	17.22	17.56	18.32	18.68	20.15
	8H	16.14	16.44	17.26	17.55	19.03	17.41	17.71	18.52	18.81	20.29
	12H	16.17	16.43	17.29	17.54	19.06	17.50	17.76	18.62	18.87	20.39
12H	4H	15.64	16.01	16.74	17.11	18.58	16.61	16.99	17.71	18.08	19.55
	6H	16.06	16.36	17.17	17.46	18.95	17.21	17.51	18.32	18.62	20.10
	8H	16.17	16.43	17.28	17.53	19.05	17.40	17.67	18.52	18.77	20.29