

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: P998664

Luminaire Tested: SA2XXDIP-B485D925UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P998664
REPORT IS A COMBINATION OF REPORTS P984407 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B485D925UB40-4F0-XX-W2A-F1
Description: Define 2 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

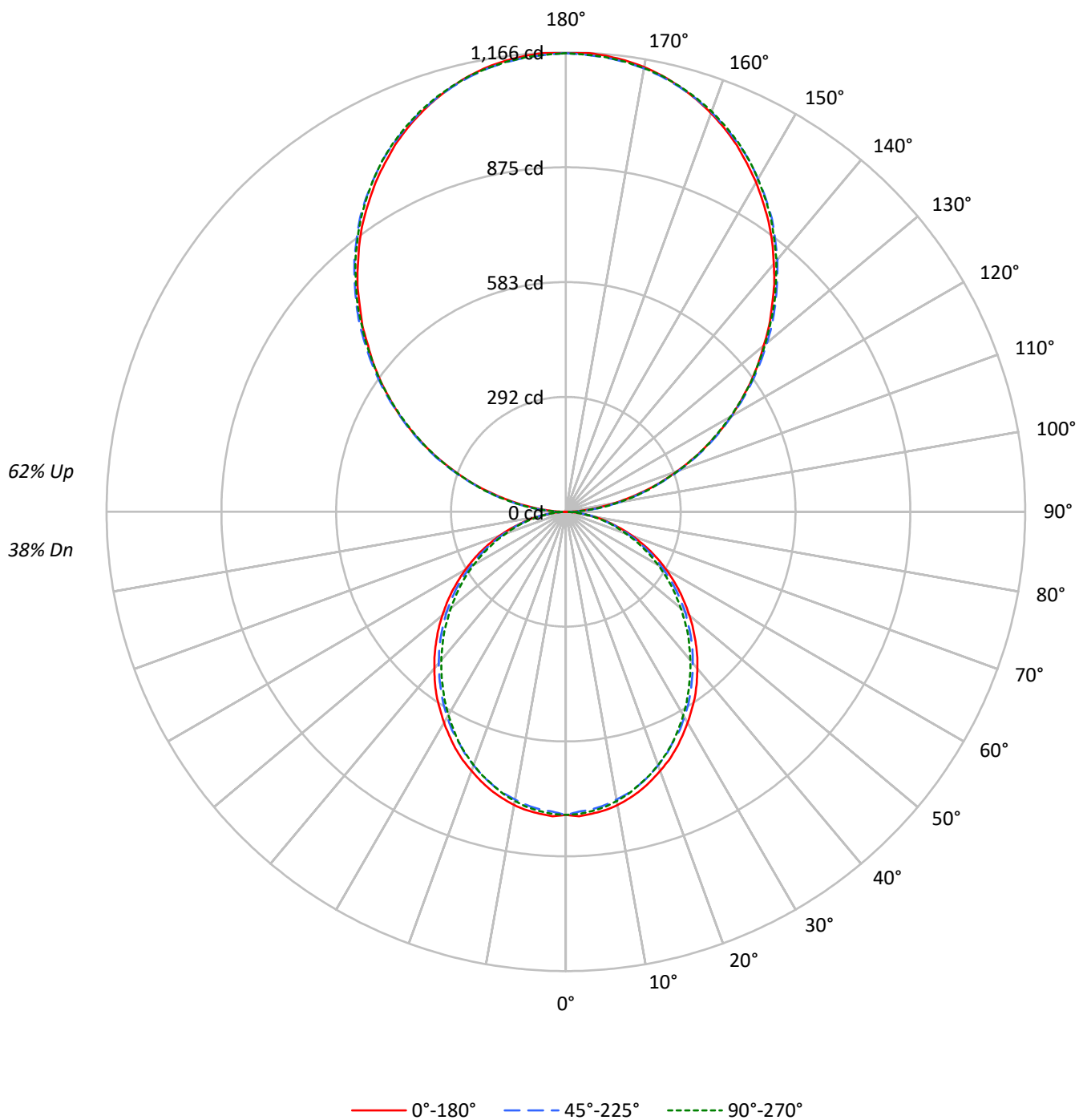
Lumens per Lamp: N/A
Luminaire Lumens: 5215.0 lumens
Efficiency: N/A
Efficacy: 99.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 52.5
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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	104	104	104	104	95	95	95	95		76	76	76		60	60	60		45	45	45
1	95	91	87	83	86	82	79	76		67	65	63		53	51	50		39	39	38
2	86	79	73	68	78	72	67	63		59	55	52		46	44	42		35	33	32
3	79	70	62	57	71	63	57	52		52	47	44		41	38	35		31	29	27
4	72	62	54	48	65	56	49	44		46	41	37		36	33	30		28	25	23
5	66	55	47	41	60	50	43	38		41	36	32		33	29	26		25	22	20
6	61	49	41	35	55	45	38	33		37	32	28		29	26	23		22	20	18
7	56	44	36	31	51	40	34	29		33	28	24		27	23	20		20	18	16
8	52	40	32	27	47	37	30	25		30	25	22		24	21	18		19	16	14
9	48	36	29	24	44	33	27	23		28	23	19		22	19	16		17	15	13
10	45	33	26	22	41	31	24	20		26	21	17		21	17	14		16	13	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12176	12176	12176
5°	12196	11606	11524
10°	12097	11076	10857
15°	11919	10544	10156
20°	11680	9965	9493
25°	11441	9359	8829
30°	11141	8790	8133
35°	10857	8190	7451
40°	10508	7598	6805
45°	10160	7011	6172
50°	9781	6413	5514
55°	9382	5772	4892
60°	8933	5082	4245
65°	8439	4378	3564
70°	7817	3609	2878
75°	6953	2782	2222
80°	5908	1889	1430
85°	4280	878	609

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10160 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.4	1.4
10°-20°	203.7	3.9
20°-30°	299.3	5.7
30°-40°	347.7	6.7
40°-50°	347.2	6.7
50°-60°	302.8	5.8
60°-70°	223.8	4.3
70°-80°	126.6	2.4
80°-90°	36.7	0.7
90°-100°	72.0	1.4
100°-110°	228.9	4.4
110°-120°	391.7	7.5
120°-130°	515.2	9.9
130°-140°	578.3	11.1
140°-150°	567.1	10.9
150°-160°	475.7	9.1
160°-170°	315.5	6.0
170°-180°	110.3	2.1
0°-30°	575.4	11.0
0°-40°	923.1	17.7
0°-60°	1573.1	30.2
0°-90°	1960.3	37.6
90°-120°	692.7	13.3
90°-150°	2353.2	45.1
90°-180°	3255.0	62.4
0°-180°	5215.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	769	769	769	769	769	
5°	769	766	758	764	763	73
15°	732	728	718	721	717	206
25°	663	657	644	646	644	305
35°	572	564	552	548	544	357
45°	465	460	449	441	438	359
55°	352	348	339	330	326	315
65°	237	233	226	219	215	235
75°	124	123	119	115	116	133
85°	30	30	29	27	26	34
90°	1	13	34	32	33	5
95°	51	61	63	63	61	57
105°	211	214	216	218	218	223
115°	393	399	397	396	393	389
125°	572	581	578	575	574	511
135°	740	750	752	752	749	572
145°	898	905	911	912	908	561
155°	1027	1030	1032	1037	1034	473
165°	1117	1116	1116	1123	1118	315
175°	1162	1159	1157	1164	1158	110
180°	1164	1164	1164	1164	1164	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	769.2	769.2	769.2	769.2	769.2
2.5°	773.7	770.0	761.8	769.2	767.7
5°	769.2	766.3	758.1	764.0	762.6
7.5°	764.0	759.6	751.5	757.4	755.9
10°	755.9	750.7	741.8	747.8	745.5
12.5°	744.8	740.4	731.5	735.2	733.7
15°	732.2	727.8	718.2	721.1	717.4
17.5°	716.7	712.3	702.6	706.3	702.6
20°	699.7	695.2	684.9	687.1	684.2
22.5°	682.7	676.0	666.4	666.4	664.9
25°	662.7	656.8	644.2	645.7	644.2
27.5°	640.5	635.3	625.7	623.5	619.8
30°	618.3	612.4	601.3	599.1	596.1
32.5°	594.7	590.2	578.4	574.0	571.0
35°	571.7	564.3	552.5	548.1	544.4
37.5°	545.8	539.2	527.4	522.2	518.5
40°	519.2	513.3	501.5	494.8	491.9
42.5°	493.3	487.4	475.6	468.2	463.7
45°	465.2	460.0	449.0	440.8	437.9
47.5°	437.9	432.7	420.8	412.7	408.3
50°	409.0	405.3	395.0	384.6	380.9
52.5°	380.9	375.7	366.1	358.0	352.8
55°	352.1	347.6	338.7	329.9	326.2
57.5°	323.2	319.5	309.9	301.0	298.1
60°	294.4	291.4	281.1	272.9	270.7
62.5°	266.3	261.1	253.7	246.3	243.3
65°	237.4	233.0	225.6	218.9	215.2
67.5°	207.8	204.1	197.5	192.3	189.3
70°	180.5	177.5	170.9	165.7	162.7
72.5°	152.4	149.4	145.7	140.5	138.3
75°	124.3	122.8	119.1	114.6	116.1
77.5°	99.1	96.2	94.7	92.5	90.2
80°	74.0	73.2	71.7	69.5	68.0
82.5°	50.3	50.3	49.6	46.6	46.6
85°	30.3	29.6	28.8	26.6	25.9
87.5°	13.3	11.8	10.4	8.1	7.4
90°	1.0	12.8	34.4	32.4	33.4
92.5°	21.6	29.5	30.5	31.4	31.4
95°	51.1	60.9	62.9	62.9	60.9
97.5°	85.5	94.3	98.2	98.2	98.2
100°	124.8	132.6	135.6	135.6	134.6
102.5°	166.0	171.9	175.8	176.8	175.8
105°	211.2	214.2	216.1	218.1	218.1
107.5°	256.4	260.3	260.3	261.3	256.4
110°	299.6	305.5	305.5	305.5	302.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	346.8	352.7	351.7	348.7	346.8
115°	393.0	398.8	396.9	395.9	393.0
117.5°	439.1	447.0	442.1	439.1	436.2
120°	485.3	493.2	485.3	485.3	482.4
122.5°	527.5	537.4	532.5	529.5	527.5
125°	571.7	580.6	577.6	574.7	573.7
127.5°	615.0	625.8	621.9	617.9	615.0
130°	655.3	668.0	666.1	664.1	660.2
132.5°	700.4	710.3	711.2	706.3	703.4
135°	739.7	750.5	752.5	751.5	748.6
137.5°	783.0	791.8	793.8	792.8	788.9
140°	821.3	830.1	835.0	835.0	831.1
142.5°	860.6	869.4	872.4	873.3	869.4
145°	897.9	904.8	910.7	911.7	907.7
147.5°	931.3	940.1	944.1	946.0	942.1
150°	965.7	971.6	975.5	978.5	975.5
152.5°	996.1	1002.0	1006.9	1010.9	1006.9
155°	1026.6	1029.5	1032.5	1037.4	1034.5
157.5°	1053.1	1055.1	1057.0	1063.9	1059.0
160°	1076.7	1078.7	1079.6	1085.5	1081.6
162.5°	1098.3	1098.3	1099.3	1106.2	1101.3
165°	1117.0	1116.0	1116.0	1122.9	1118.0
167.5°	1133.7	1130.7	1130.7	1137.6	1132.7
170°	1146.4	1143.5	1142.5	1149.4	1143.5
172.5°	1155.3	1152.3	1151.4	1158.2	1152.3
175°	1162.2	1159.2	1157.3	1164.1	1158.2
177.5°	1166.1	1163.1	1161.2	1167.1	1161.2
180°	1164.1	1164.1	1164.1	1164.1	1164.1

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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	12.65	13.41	13.70	14.47	15.91	13.43	14.19	14.49	15.25	16.69
	3H	13.98	14.66	15.04	15.73	17.18	15.05	15.73	16.11	16.80	18.25
	4H	14.38	15.02	15.46	16.09	17.56	15.63	16.28	16.71	17.35	18.81
	6H	14.59	15.19	15.68	16.26	17.74	16.03	16.63	17.12	17.70	19.18
	8H	14.62	15.19	15.71	16.28	17.74	16.14	16.70	17.23	17.79	19.26
	12H	14.61	15.14	15.70	16.23	17.72	16.18	16.72	17.28	17.80	19.29
4H	2H	13.10	13.75	14.19	14.82	16.28	13.75	14.39	14.83	15.46	16.93
	3H	14.61	15.15	15.70	16.25	17.73	15.52	16.06	16.61	17.16	18.63
	4H	15.11	15.61	16.21	16.70	18.19	16.20	16.69	17.29	17.78	19.28
	6H	15.41	15.84	16.52	16.95	18.44	16.69	17.11	17.79	18.22	19.71
	8H	15.47	15.86	16.57	16.97	18.47	16.83	17.22	17.93	18.33	19.83
	12H	15.46	15.82	16.58	16.94	18.45	16.88	17.24	18.00	18.36	19.87
8H	4H	15.28	15.68	16.39	16.78	18.29	16.27	16.67	17.38	17.77	19.28
	6H	15.66	15.99	16.79	17.13	18.64	16.84	17.17	17.96	18.31	19.81
	8H	15.76	16.05	16.90	17.18	18.70	17.03	17.31	18.16	18.44	19.96
	12H	15.79	16.04	16.93	17.16	18.72	17.12	17.37	18.26	18.49	20.05
12H	4H	15.26	15.62	16.38	16.73	18.25	16.23	16.59	17.35	17.71	19.22
	6H	15.68	15.97	16.81	17.09	18.61	16.83	17.12	17.96	18.24	19.76
	8H	15.79	16.04	16.92	17.16	18.72	17.02	17.27	18.16	18.39	19.95