

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: P998484

Luminaire Tested: SA2XXDIP-B485D330UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P998484
REPORT IS A COMBINATION OF REPORTS P984227 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B485D330UB40-4F0-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

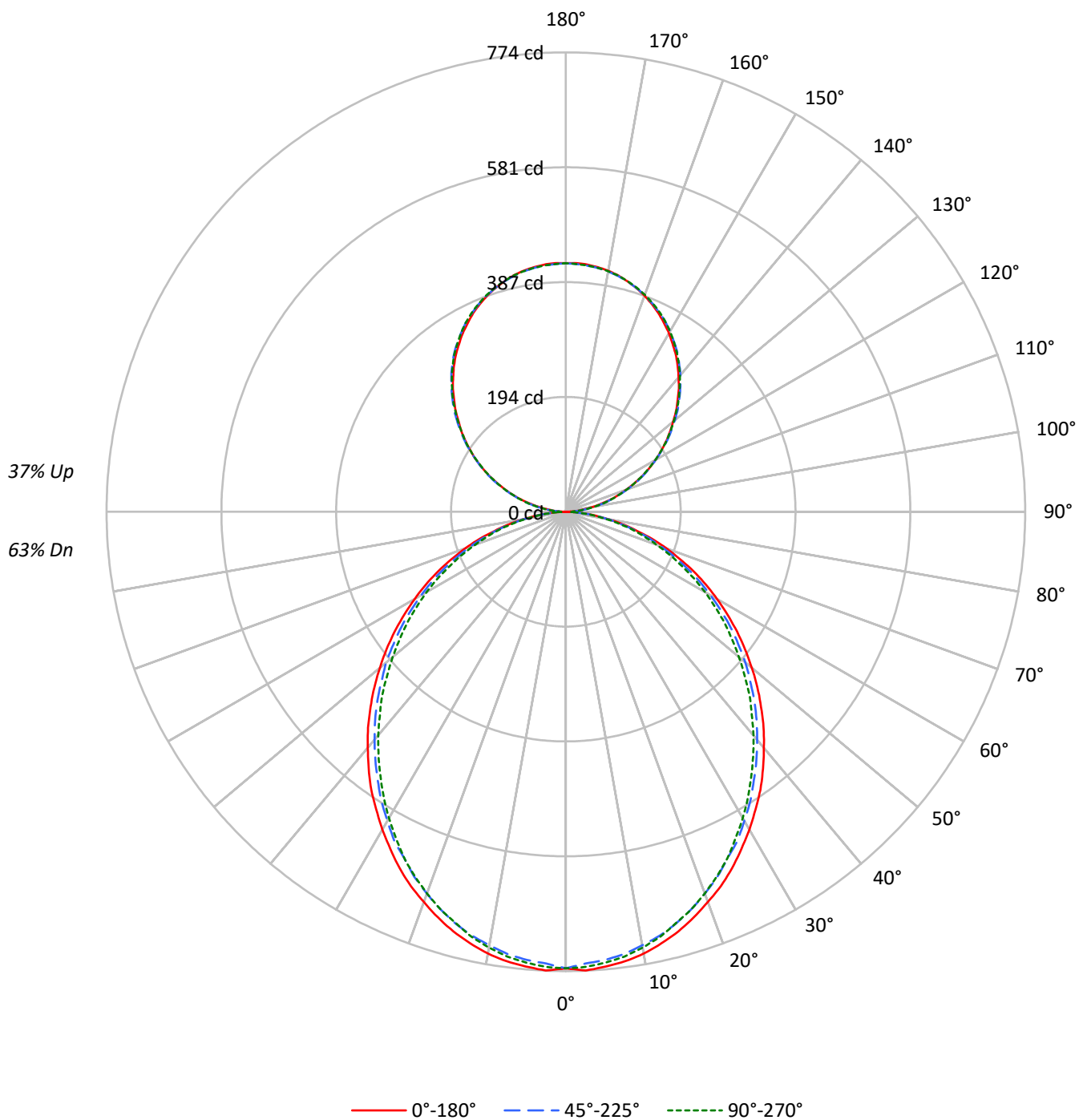
Lumens per Lamp: N/A
Luminaire Lumens: 3129.0 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 33.3
Input Voltage (V):
Input Current (A_{in}): 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	110	110	110	110	103	103	103	103	90	90	90	79	79	79	68	68	68
1	101	96	92	89	94	90	87	84	79	77	74	69	67	65	60	58	57
2	92	84	78	72	86	79	73	69	70	65	62	61	58	55	53	50	48
3	84	74	66	60	78	70	63	57	61	56	52	54	50	46	47	44	41
4	77	65	57	51	71	62	54	49	55	49	44	48	43	40	42	38	35
5	70	58	50	44	66	55	48	42	49	43	38	43	38	35	38	34	31
6	65	53	44	38	61	50	42	37	44	38	33	39	34	30	34	30	27
7	60	47	39	34	56	45	38	32	40	34	30	36	31	27	31	27	24
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	29	25	22
9	52	40	32	27	49	37	30	26	34	28	24	30	25	22	27	23	20
10	49	36	29	24	46	35	28	23	31	25	21	28	23	20	25	21	18

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	2.3
10°-20°	203.7	6.5
20°-30°	299.3	9.6
30°-40°	347.7	11.1
40°-50°	347.2	11.1
50°-60°	302.8	9.7
60°-70°	223.8	7.2
70°-80°	126.6	4.0
80°-90°	34.6	1.1
90°-100°	25.9	0.8
100°-110°	82.3	2.6
110°-120°	140.9	4.5
120°-130°	185.3	5.9
130°-140°	208.0	6.6
140°-150°	204.0	6.5
150°-160°	171.1	5.5
160°-170°	113.5	3.6
170°-180°	39.7	1.3
0°-30°	575.4	18.4
0°-40°	923.1	29.5
0°-60°	1573.1	50.3
0°-90°	1958.2	62.6
90°-120°	249.2	8.0
90°-150°	846.5	27.1
90°-180°	1171.0	37.4
0°-180°	3129.0	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°	0	5	12	12	12	3
95°	18	22	23	23	22	21
105°	76	77	78	78	78	80
115°	141	144	143	142	141	140
125°	206	209	208	207	206	184
135°	266	270	271	270	269	206
145°	323	326	328	328	326	202
155°	369	370	371	373	372	170
165°	402	402	402	404	402	113
175°	418	417	416	419	417	40
180°	419	419	419	419	419	

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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°	0.4	4.6	12.4	11.7	12.0
92.5°	7.8	10.6	11.0	11.3	11.3
95°	18.4	21.9	22.6	22.6	21.9
97.5°	30.7	33.9	35.3	35.3	35.3
100°	44.9	47.7	48.8	48.8	48.4
102.5°	59.7	61.8	63.3	63.6	63.3
105°	76.0	77.0	77.7	78.5	78.5
107.5°	92.2	93.6	93.6	94.0	92.2
110°	107.8	109.9	109.9	109.9	108.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	124.7	126.9	126.5	125.5	124.7
115°	141.4	143.5	142.8	142.4	141.4
117.5°	158.0	160.8	159.0	158.0	156.9
120°	174.6	177.4	174.6	174.6	173.5
122.5°	189.8	193.3	191.5	190.5	189.8
125°	205.7	208.9	207.8	206.7	206.4
127.5°	221.2	225.1	223.7	222.3	221.2
130°	235.7	240.3	239.6	238.9	237.5
132.5°	252.0	255.5	255.9	254.1	253.0
135°	266.1	270.0	270.7	270.3	269.3
137.5°	281.7	284.8	285.5	285.2	283.8
140°	295.4	298.6	300.4	300.4	299.0
142.5°	309.6	312.8	313.8	314.2	312.8
145°	323.0	325.5	327.6	328.0	326.5
147.5°	335.0	338.2	339.6	340.3	338.9
150°	347.4	349.5	350.9	352.0	350.9
152.5°	358.3	360.5	362.2	363.6	362.2
155°	369.3	370.4	371.4	373.2	372.1
157.5°	378.8	379.5	380.3	382.7	381.0
160°	387.3	388.0	388.4	390.5	389.1
162.5°	395.1	395.1	395.4	397.9	396.2
165°	401.8	401.5	401.5	403.9	402.2
167.5°	407.8	406.8	406.8	409.2	407.5
170°	412.4	411.4	411.0	413.5	411.4
172.5°	415.6	414.5	414.2	416.7	414.5
175°	418.1	417.0	416.3	418.8	416.7
177.5°	419.5	418.4	417.7	419.8	417.7
180°	418.8	418.8	418.8	418.8	418.8

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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	15.01	15.99	15.85	16.86	17.94	15.79	16.77	16.63	17.64	18.72
	3H	16.35	17.24	17.21	18.11	19.22	17.42	18.31	18.28	19.18	20.29
	4H	16.76	17.60	17.63	18.48	19.60	18.02	18.86	18.89	19.74	20.85
	6H	16.99	17.76	17.87	18.65	19.78	18.43	19.20	19.31	20.09	21.22
	8H	17.02	17.76	17.91	18.66	19.79	18.54	19.28	19.43	20.18	21.31
	12H	17.02	17.72	17.91	18.62	19.77	18.59	19.29	19.49	20.19	21.35
4H	2H	15.49	16.33	16.36	17.21	18.32	16.13	16.97	17.01	17.85	18.97
	3H	17.02	17.72	17.90	18.63	19.76	17.92	18.62	18.81	19.53	20.67
	4H	17.53	18.17	18.43	19.07	20.23	18.61	19.25	19.51	20.16	21.31
	6H	17.84	18.39	18.75	19.32	20.48	19.11	19.66	20.03	20.60	21.76
	8H	17.90	18.41	18.81	19.34	20.51	19.26	19.77	20.17	20.70	21.87
	12H	17.91	18.37	18.84	19.31	20.49	19.33	19.79	20.26	20.74	21.91
8H	4H	17.71	18.23	18.63	19.16	20.33	18.71	19.22	19.62	20.15	21.32
	6H	18.10	18.53	19.05	19.50	20.67	19.28	19.71	20.22	20.67	21.85
	8H	18.21	18.58	19.16	19.54	20.73	19.47	19.85	20.42	20.81	22.00
	12H	18.24	18.58	19.20	19.53	20.77	19.57	19.91	20.53	20.86	22.10
12H	4H	17.70	18.17	18.64	19.11	20.29	18.68	19.14	19.61	20.08	21.26
	6H	18.12	18.50	19.07	19.46	20.65	19.27	19.65	20.22	20.61	21.80
	8H	18.24	18.57	19.20	19.53	20.76	19.48	19.81	20.43	20.76	22.00