

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: P998545

Luminaire Tested: SA2XXDIP-B485D530UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P998545
REPORT IS A COMBINATION OF REPORTS P984288 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B485D530UB40-4F0-XX-W2A-F4
Description: Define 2 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

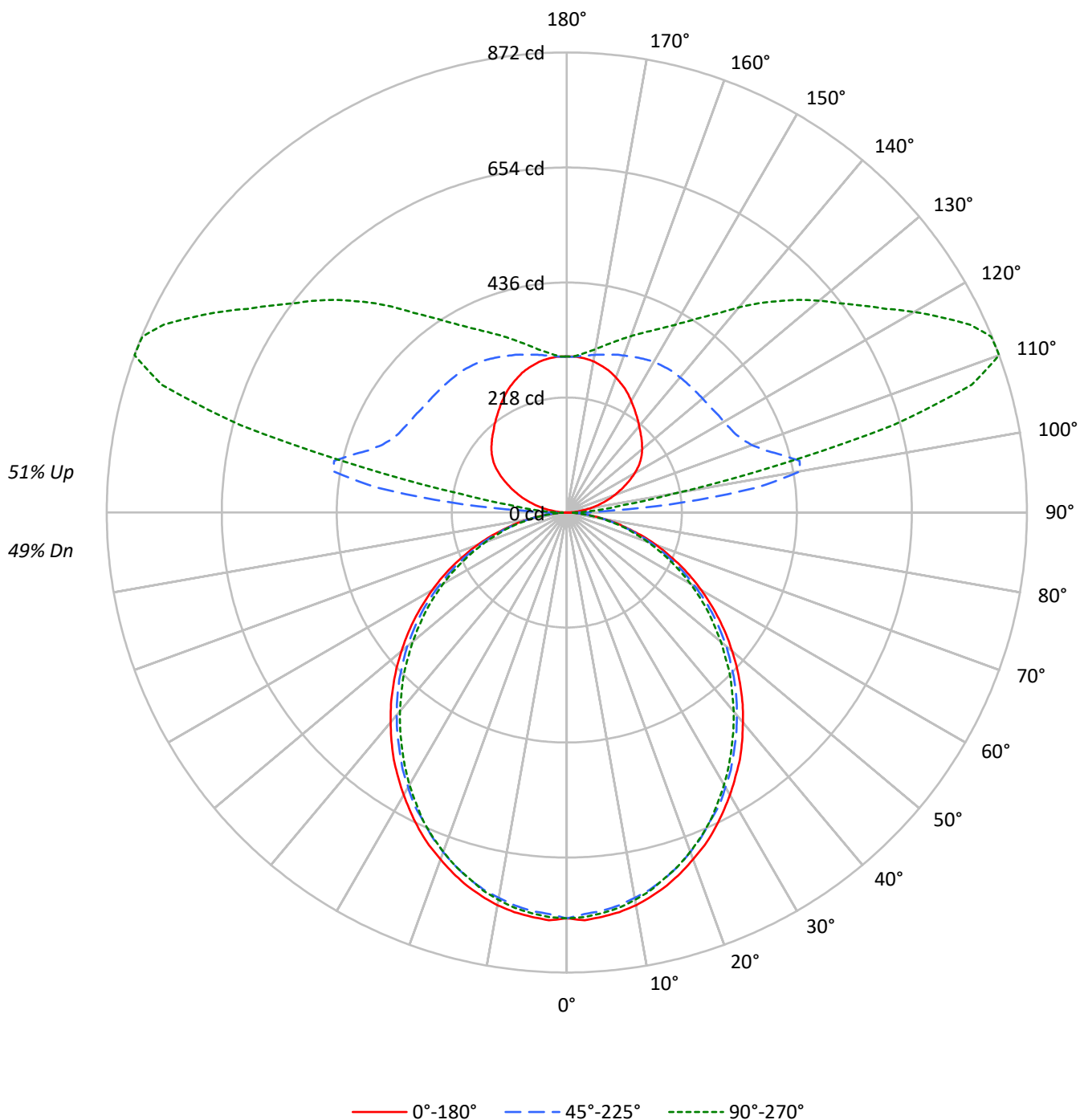
Lumens per Lamp: N/A
Luminaire Lumens: 4019.3 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 39.4
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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55
1	98	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46
2	89	81	75	70	81	75	70	65	63	60	56	53	50	47	43	41	39
3	81	72	64	58	74	66	60	55	56	51	47	47	43	40	38	35	33
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29
5	68	56	48	42	62	52	45	40	45	39	35	37	33	30	31	27	25
6	63	51	42	37	57	47	40	35	40	34	30	34	29	26	28	25	22
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	25	22	20
8	54	41	34	28	49	39	32	27	33	28	24	28	24	21	23	20	18
9	50	38	30	25	46	35	29	24	30	25	21	26	22	19	21	18	16
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	14

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	1.8
10°-20°	203.7	5.1
20°-30°	299.3	7.4
30°-40°	347.7	8.7
40°-50°	347.2	8.6
50°-60°	302.8	7.5
60°-70°	223.8	5.6
70°-80°	126.6	3.2
80°-90°	35.3	0.9
90°-100°	119.8	3.0
100°-110°	405.0	10.1
110°-120°	425.7	10.6
120°-130°	350.1	8.7
130°-140°	281.3	7.0
140°-150°	212.5	5.3
150°-160°	149.4	3.7
160°-170°	88.0	2.2
170°-180°	28.6	0.7
0°-30°	575.4	14.3
0°-40°	923.1	23.0
0°-60°	1573.1	39.1
0°-90°	1958.9	48.7
90°-120°	950.6	23.6
90°-150°	1794.5	44.6
90°-180°	2060.0	51.3
0°-180°	4019.3	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	8	19	18	19	3
95°	20	49	223	84	65	21
105°	69	105	421	753	640	74
115°	122	154	352	727	843	121
125°	170	202	339	589	684	152
135°	200	239	335	495	567	155
145°	228	263	333	413	452	143
155°	260	280	323	366	380	120
165°	283	292	310	328	334	80
175°	295	295	298	302	301	28
180°	296	296	296	296	296	

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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°	0.6	7.6	19.3	18.5	18.8
92.5°	8.5	27.0	87.5	40.4	34.7
95°	19.9	48.9	222.8	84.2	64.8
97.5°	29.6	64.5	363.2	168.8	108.6
100°	43.8	79.0	449.0	336.2	203.5
102.5°	56.8	92.0	451.8	568.3	396.7
105°	69.3	104.6	421.1	752.8	640.5
107.5°	83.0	117.0	392.7	819.6	804.8
110°	96.6	129.8	373.4	808.7	871.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	109.1	142.1	360.9	772.0	870.7
115°	122.2	154.3	352.4	727.2	842.8
117.5°	135.8	166.6	347.8	684.2	800.8
120°	148.3	178.4	343.8	646.0	760.4
122.5°	160.3	190.6	341.6	616.0	718.4
125°	170.5	201.8	338.7	589.1	683.7
127.5°	179.0	212.2	337.0	566.1	651.3
130°	186.4	221.6	335.9	542.8	624.6
132.5°	193.2	230.8	335.3	518.6	596.7
135°	200.1	238.7	334.7	495.0	566.6
137.5°	206.3	245.5	334.7	471.2	537.6
140°	213.7	251.8	334.2	450.1	507.5
142.5°	221.1	256.9	334.2	430.0	477.4
145°	228.5	262.6	333.0	413.4	452.4
147.5°	236.4	267.1	331.3	399.0	430.2
150°	244.4	271.6	329.6	386.5	410.9
152.5°	252.3	276.2	326.8	376.0	394.4
155°	259.7	280.4	323.4	365.7	380.2
157.5°	266.0	283.9	320.0	356.0	367.7
160°	272.2	287.3	316.6	346.4	355.8
162.5°	278.5	289.8	313.7	337.3	344.4
165°	283.0	291.6	309.7	328.5	333.6
167.5°	287.0	293.2	306.3	320.5	323.4
170°	291.0	294.2	303.5	313.2	314.3
172.5°	293.3	295.0	300.1	306.6	306.9
175°	295.0	295.2	297.8	301.5	300.6
177.5°	296.1	295.5	295.5	297.8	296.1
180°	295.5	295.5	295.5	295.5	295.5

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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	13.80	14.65	14.77	15.63	16.92	14.58	15.43	15.55	16.41	17.70
	3H	15.14	15.90	16.12	16.89	18.20	16.21	16.97	17.19	17.96	19.27
	4H	15.54	16.26	16.53	17.26	18.58	16.80	17.52	17.79	18.52	19.83
	6H	15.76	16.43	16.76	17.43	18.76	17.20	17.87	18.20	18.87	20.20
	8H	15.79	16.42	16.80	17.44	18.77	17.31	17.94	18.32	18.96	20.29
	12H	15.78	16.38	16.80	17.39	18.75	17.35	17.96	18.37	18.97	20.32
4H	2H	14.27	14.99	15.27	15.99	17.30	14.91	15.63	15.91	16.63	17.95
	3H	15.78	16.39	16.79	17.41	18.74	16.69	17.29	17.70	18.32	19.65
	4H	16.29	16.84	17.31	17.86	19.21	17.37	17.92	18.39	18.94	20.30
	6H	16.59	17.07	17.62	18.11	19.46	17.87	18.34	18.89	19.38	20.73
	8H	16.65	17.09	17.68	18.13	19.49	18.01	18.45	19.04	19.49	20.85
	12H	16.65	17.05	17.69	18.10	19.47	18.07	18.47	19.12	19.52	20.89
8H	4H	16.46	16.91	17.49	17.94	19.31	17.46	17.90	18.48	18.93	20.30
	6H	16.85	17.21	17.90	18.29	19.65	18.02	18.39	19.08	19.47	20.83
	8H	16.95	17.27	18.01	18.33	19.72	18.21	18.54	19.27	19.60	20.98
	12H	16.98	17.27	18.04	18.32	19.75	18.31	18.60	19.37	19.65	21.08
12H	4H	16.45	16.85	17.49	17.90	19.27	17.42	17.82	18.47	18.87	20.24
	6H	16.87	17.19	17.92	18.25	19.63	18.02	18.34	19.08	19.40	20.78
	8H	16.98	17.26	18.04	18.32	19.74	18.21	18.50	19.27	19.55	20.98