

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: P998418

Luminaire Tested: SA2XXDIP-B485D1080UB35-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P998418
REPORT IS A COMBINATION OF REPORTS P984158 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B485D1080UB35-4F0-XX-W2A-F1
Description: Define 2 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

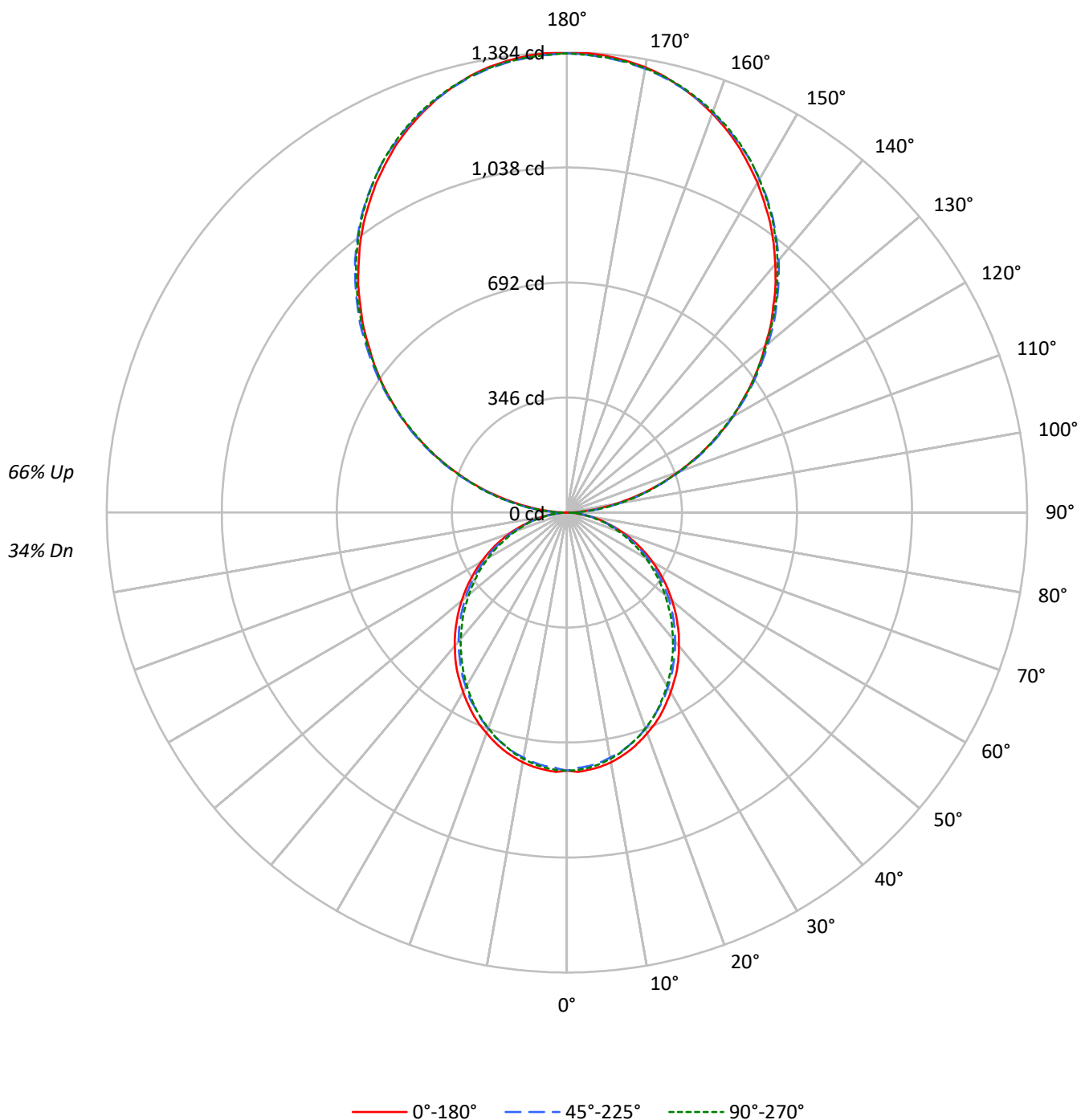
Lumens per Lamp: N/A
Luminaire Lumens: 5842.0 lumens
Efficiency: N/A
Efficacy: 99.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 59
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41
1	94	90	86	83	85	81	78	75	65	63	61	50	49	47	36	36	35
2	86	78	73	68	77	71	66	62	57	53	50	44	42	40	32	31	29
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	27	25
4	71	61	53	47	64	55	49	44	45	40	36	35	31	29	25	23	21
5	65	54	46	40	59	49	42	37	40	35	31	31	28	25	23	21	19
6	60	49	41	35	54	44	37	32	36	31	27	28	24	22	21	18	16
7	56	44	36	31	50	40	33	28	32	27	24	25	22	19	19	16	15
8	52	40	32	27	46	36	29	25	29	24	21	23	20	17	17	15	13
9	48	36	29	24	43	33	26	22	27	22	19	21	18	15	16	14	12
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	12	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12295	12295	12295
5°	12315	11719	11636
10°	12213	11184	10963
15°	12035	10647	10255
20°	11794	10061	9585
25°	11552	9451	8916
30°	11249	8876	8212
35°	10964	8270	7524
40°	10611	7671	6870
45°	10258	7078	6231
50°	9876	6475	5568
55°	9473	5829	4939
60°	9018	5131	4286
65°	8521	4421	3599
70°	7891	3643	2907
75°	7021	2808	2243
80°	5964	1908	1444
85°	4322	887	614

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10258 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.1	1.3
10°-20°	205.7	3.5
20°-30°	302.3	5.2
30°-40°	351.0	6.0
40°-50°	350.6	6.0
50°-60°	305.7	5.2
60°-70°	226.0	3.9
70°-80°	127.9	2.2
80°-90°	37.7	0.6
90°-100°	85.5	1.5
100°-110°	271.7	4.7
110°-120°	464.8	8.0
120°-130°	611.3	10.5
130°-140°	686.2	11.7
140°-150°	672.9	11.5
150°-160°	564.5	9.7
160°-170°	374.4	6.4
170°-180°	130.8	2.2
0°-30°	581.0	9.9
0°-40°	932.1	16.0
0°-60°	1588.4	27.2
0°-90°	1979.9	33.9
90°-120°	822.0	14.1
90°-150°	2792.4	47.8
90°-180°	3862.0	66.1
0°-180°	5842.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	777	777	777	777	777	
5°	777	774	766	772	770	74
15°	739	735	725	728	724	208
25°	669	663	650	652	650	308
35°	577	570	558	553	550	360
45°	470	464	453	445	442	363
55°	356	351	342	333	329	318
65°	240	235	228	221	217	237
75°	126	124	120	116	117	134
85°	31	30	29	27	26	34
90°	1	15	41	38	40	6
95°	61	72	75	75	72	68
105°	251	254	256	259	259	265
115°	466	473	471	470	466	461
125°	678	689	685	682	681	606
135°	878	891	893	892	888	678
145°	1066	1074	1081	1082	1077	666
155°	1218	1222	1225	1231	1228	561
165°	1325	1324	1324	1332	1327	374
175°	1379	1376	1373	1381	1374	131
180°	1381	1381	1381	1381	1381	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	776.7	776.7	776.7	776.7	776.7
2.5°	781.2	777.4	769.2	776.7	775.2
5°	776.7	773.7	765.5	771.5	770.0
7.5°	771.5	767.0	758.8	764.7	763.2
10°	763.2	758.0	749.0	755.0	752.8
12.5°	752.0	747.6	738.6	742.3	740.8
15°	739.3	734.9	725.2	728.1	724.4
17.5°	723.7	719.2	709.5	713.2	709.5
20°	706.5	702.0	691.5	693.8	690.8
22.5°	689.3	682.6	672.9	672.9	671.4
25°	669.1	663.2	650.5	652.0	650.5
27.5°	646.7	641.5	631.8	629.6	625.8
30°	624.3	618.4	607.2	604.9	601.9
32.5°	600.4	596.0	584.0	579.5	576.5
35°	577.3	569.8	557.9	553.4	549.7
37.5°	551.1	544.4	532.5	527.2	523.5
40°	524.3	518.3	506.3	499.6	496.6
42.5°	498.1	492.1	480.2	472.7	468.2
45°	469.7	464.5	453.3	445.1	442.1
47.5°	442.1	436.9	424.9	416.7	412.2
50°	413.0	409.3	398.8	388.3	384.6
52.5°	384.6	379.4	369.7	361.5	356.2
55°	355.5	351.0	342.0	333.1	329.3
57.5°	326.4	322.6	312.9	304.0	301.0
60°	297.2	294.2	283.8	275.6	273.3
62.5°	268.9	263.6	256.2	248.7	245.7
65°	239.7	235.2	227.8	221.1	217.3
67.5°	209.9	206.1	199.4	194.2	191.2
70°	182.2	179.2	172.5	167.3	164.3
72.5°	153.8	150.9	147.1	141.9	139.7
75°	125.5	124.0	120.2	115.8	117.2
77.5°	100.1	97.1	95.6	93.4	91.1
80°	74.7	73.9	72.4	70.2	68.7
82.5°	50.8	50.8	50.0	47.0	47.0
85°	30.6	29.9	29.1	26.9	26.1
87.5°	13.4	11.9	10.5	8.2	7.5
90°	1.2	15.2	40.8	38.5	39.6
92.5°	25.6	35.0	36.1	37.3	37.3
95°	60.6	72.3	74.6	74.6	72.3
97.5°	101.4	111.9	116.6	116.6	116.6
100°	148.0	157.4	160.9	160.9	159.7
102.5°	197.0	204.0	208.7	209.8	208.7
105°	250.6	254.1	256.5	258.8	258.8
107.5°	304.3	308.9	308.9	310.1	304.3
110°	355.5	362.5	362.5	362.5	359.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	411.5	418.5	417.3	413.8	411.5
115°	466.3	473.3	471.0	469.8	466.3
117.5°	521.1	530.4	524.6	521.1	517.6
120°	575.9	585.2	575.9	575.9	572.4
122.5°	626.0	637.6	631.8	628.3	626.0
125°	678.4	688.9	685.4	681.9	680.8
127.5°	729.7	742.6	737.9	733.2	729.7
130°	777.5	792.7	790.4	788.0	783.4
132.5°	831.2	842.8	844.0	838.2	834.7
135°	877.8	890.6	892.9	891.8	888.3
137.5°	929.1	939.6	941.9	940.7	936.1
140°	974.5	985.0	990.9	990.9	986.2
142.5°	1021.2	1031.7	1035.2	1036.3	1031.7
145°	1065.5	1073.6	1080.6	1081.8	1077.1
147.5°	1105.1	1115.6	1120.3	1122.6	1117.9
150°	1145.9	1152.9	1157.6	1161.1	1157.6
152.5°	1182.0	1189.0	1194.9	1199.5	1194.9
155°	1218.2	1221.7	1225.2	1231.0	1227.5
157.5°	1249.7	1252.0	1254.3	1262.5	1256.6
160°	1277.6	1280.0	1281.1	1288.1	1283.5
162.5°	1303.3	1303.3	1304.4	1312.6	1306.8
165°	1325.4	1324.3	1324.3	1332.4	1326.6
167.5°	1345.2	1341.7	1341.7	1349.9	1344.1
170°	1360.4	1356.9	1355.7	1363.9	1356.9
172.5°	1370.9	1367.4	1366.2	1374.4	1367.4
175°	1379.0	1375.5	1373.2	1381.4	1374.4
177.5°	1383.7	1380.2	1377.9	1384.9	1377.9
180°	1381.4	1381.4	1381.4	1381.4	1381.4

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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	12.24	12.98	13.33	14.06	15.54	13.03	13.76	14.11	14.84	16.33
	3H	13.57	14.23	14.66	15.32	16.82	14.64	15.30	15.73	16.39	17.89
	4H	13.97	14.59	15.07	15.69	17.19	15.23	15.85	16.33	16.94	18.45
	6H	14.18	14.76	15.29	15.85	17.37	15.62	16.20	16.74	17.29	18.81
	8H	14.21	14.75	15.32	15.87	17.38	15.73	16.27	16.84	17.39	18.90
	12H	14.20	14.71	15.32	15.82	17.36	15.77	16.29	16.89	17.39	18.93
4H	2H	12.70	13.32	13.81	14.41	15.92	13.34	13.96	14.45	15.06	16.56
	3H	14.20	14.72	15.32	15.84	17.36	15.11	15.63	16.22	16.75	18.27
	4H	14.70	15.18	15.82	16.29	17.83	15.78	16.26	16.91	17.37	18.91
	6H	15.00	15.41	16.13	16.54	18.07	16.27	16.68	17.40	17.82	19.35
	8H	15.05	15.43	16.18	16.56	18.11	16.41	16.79	17.54	17.92	19.47
	12H	15.04	15.39	16.19	16.53	18.08	16.47	16.81	17.61	17.95	19.50
8H	4H	14.87	15.25	15.99	16.37	17.92	15.86	16.24	16.99	17.37	18.92
	6H	15.24	15.56	16.39	16.73	18.27	16.42	16.74	17.57	17.91	19.45
	8H	15.35	15.62	16.50	16.77	18.33	16.61	16.89	17.76	18.03	19.60
	12H	15.37	15.61	16.53	16.76	18.36	16.70	16.94	17.86	18.09	19.69
12H	4H	14.84	15.19	15.99	16.33	17.88	15.82	16.16	16.96	17.30	18.85
	6H	15.26	15.54	16.42	16.68	18.25	16.41	16.69	17.57	17.84	19.40
	8H	15.37	15.61	16.53	16.75	18.36	16.60	16.85	17.76	17.99	19.59