

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: P998406

Luminaire Tested: SA2XXDIP-B485D1080UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P998406
REPORT IS A COMBINATION OF REPORTS P984146 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B485D1080UB30-4F0-XX-W2A-D1
Description: Define 2 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

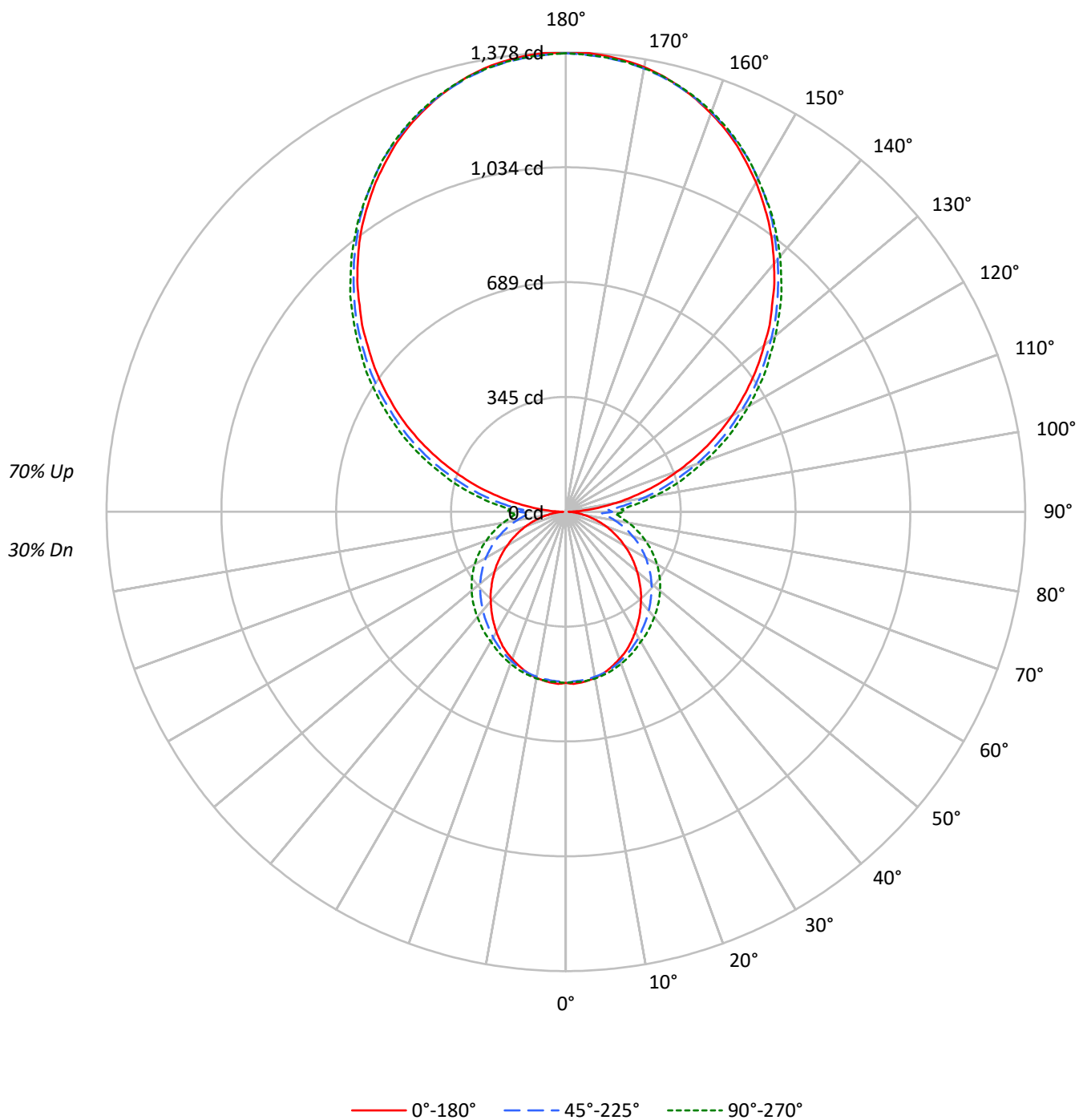
Lumens per Lamp: N/A
Luminaire Lumens: 5808.0 lumens
Efficiency: N/A
Efficacy: 98.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	38	38	38
1	92	88	84	80	83	79	75	72	62	59	57	46	45	43	32	31	30
2	84	76	70	65	75	68	63	58	54	50	47	40	38	35	28	26	25
3	76	67	59	53	68	60	53	48	47	42	39	35	32	29	24	22	21
4	69	59	51	45	62	53	46	41	41	37	33	31	28	25	21	19	17
5	64	52	44	38	57	47	40	34	37	32	28	28	24	21	19	17	15
6	58	46	38	33	52	42	35	30	33	28	24	25	21	18	17	15	13
7	54	42	34	28	48	38	31	26	30	25	21	23	19	16	16	13	11
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10
9	46	34	27	22	41	31	24	20	25	20	16	19	15	13	13	11	9
10	43	31	24	19	39	28	22	18	23	18	15	17	14	11	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8122	8122	8122
5°	8159	7775	7733
10°	8105	7506	7397
15°	7990	7228	7054
20°	7846	6935	6728
25°	7703	6655	6432
30°	7505	6371	6139
35°	7302	6097	5924
40°	7090	5859	5711
45°	6886	5643	5524
50°	6669	5445	5341
55°	6440	5234	5153
60°	6160	5015	4957
65°	5869	4763	4730
70°	5539	4492	4486
75°	5119	4221	4257
80°	4455	3940	4018
85°	3786	3674	3812

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6886 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.6	0.8
10°-20°	139.5	2.4
20°-30°	211.4	3.6
30°-40°	257.4	4.4
40°-50°	277.0	4.8
50°-60°	269.0	4.6
60°-70°	234.9	4.0
70°-80°	180.8	3.1
80°-90°	125.0	2.2
90°-100°	168.6	2.9
100°-110°	331.5	5.7
110°-120°	503.2	8.7
120°-130°	631.2	10.9
130°-140°	692.8	11.9
140°-150°	671.7	11.6
150°-160°	562.1	9.7
160°-170°	372.8	6.4
170°-180°	130.3	2.2
0°-30°	399.6	6.9
0°-40°	657.0	11.3
0°-60°	1202.9	20.7
0°-90°	1743.6	30.0
90°-120°	1003.4	17.3
90°-150°	2999.1	51.6
90°-180°	4064.0	70.0
0°-180°	5808.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	513	513	513	513	513	
5°	515	512	508	512	512	49
15°	491	492	492	499	498	138
25°	446	451	458	467	469	205
35°	384	397	411	428	433	240
45°	315	335	361	384	392	243
55°	242	268	307	334	344	216
65°	165	202	245	276	286	164
75°	92	133	181	213	222	97
85°	27	73	120	152	162	28
90°	9	66	139	166	176	9
95°	66	113	160	188	195	72
105°	253	278	319	348	356	268
115°	467	482	514	535	540	462
125°	677	688	708	724	730	605
135°	875	888	897	912	914	676
145°	1061	1069	1076	1082	1081	663
155°	1213	1217	1220	1226	1222	558
165°	1320	1319	1319	1327	1321	372
175°	1373	1370	1368	1376	1369	130
180°	1376	1376	1376	1376	1376	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	513.1	513.1	513.1	513.1	513.1
2.5°	516.9	514.6	509.4	513.1	511.7
5°	514.6	512.4	507.9	512.4	511.7
7.5°	510.9	509.4	505.7	510.9	510.2
10°	506.5	505.0	502.7	508.7	507.9
12.5°	499.0	499.8	498.3	504.2	503.5
15°	490.8	492.3	492.3	499.0	498.3
17.5°	480.4	483.4	485.6	492.3	492.3
20°	470.0	473.7	476.7	484.9	484.9
22.5°	458.9	463.3	467.8	476.0	477.5
25°	446.2	451.4	458.1	467.0	469.3
27.5°	431.3	439.5	447.0	458.1	459.6
30°	416.5	426.1	435.8	447.7	449.9
32.5°	400.1	411.3	423.2	437.3	441.8
35°	384.5	397.1	411.3	427.6	432.8
37.5°	367.4	381.5	399.4	417.2	422.4
40°	350.3	366.6	386.7	406.1	412.8
42.5°	333.9	350.3	374.1	395.6	402.3
45°	315.3	335.4	361.4	384.5	391.9
47.5°	297.5	319.0	348.8	372.6	380.8
50°	278.9	301.9	335.4	360.7	368.9
52.5°	261.0	285.6	321.3	347.3	356.2
55°	241.7	268.5	307.1	333.9	343.6
57.5°	223.1	252.9	291.5	320.5	330.2
60°	203.0	235.0	277.4	305.7	316.1
62.5°	185.2	218.6	261.0	291.5	301.2
65°	165.1	201.5	245.4	275.9	285.6
67.5°	147.3	185.2	229.8	260.3	270.7
70°	127.9	166.6	212.7	244.7	253.6
72.5°	110.1	150.2	197.1	228.3	239.5
75°	91.5	133.1	180.7	212.7	222.4
77.5°	73.6	116.8	165.1	197.1	207.5
80°	55.8	101.1	149.5	180.7	191.1
82.5°	40.9	85.5	134.6	165.8	175.5
85°	26.8	72.9	120.5	151.7	162.1
87.5°	16.4	61.0	108.6	139.1	148.7
90°	8.6	65.7	138.8	166.2	176.3
92.5°	32.2	80.9	127.5	157.6	166.5
95°	66.3	112.9	159.8	188.1	194.7
97.5°	106.2	148.6	196.4	223.9	232.9
100°	152.6	189.4	234.6	262.1	269.1
102.5°	200.7	232.2	277.0	304.9	311.9
105°	253.3	278.4	319.4	347.7	355.9
107.5°	306.7	329.2	366.4	392.8	395.2
110°	357.1	378.8	415.3	439.1	443.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	412.8	431.7	464.7	485.0	490.9
115°	467.4	482.5	513.6	534.7	539.5
117.5°	521.1	536.4	561.8	580.6	584.6
120°	575.7	588.0	608.5	629.3	634.0
122.5°	625.6	638.0	659.7	676.3	680.7
125°	677.1	687.6	707.9	724.5	730.1
127.5°	728.2	740.2	755.6	769.6	772.8
130°	775.8	790.1	803.5	819.0	820.3
132.5°	829.2	840.0	852.4	863.7	866.2
135°	874.9	887.6	897.4	911.9	914.3
137.5°	925.9	936.4	942.5	955.4	956.0
140°	971.2	981.0	988.3	1000.2	999.9
142.5°	1017.6	1027.4	1030.9	1040.9	1040.0
145°	1061.1	1069.2	1076.1	1081.8	1080.9
147.5°	1100.5	1111.0	1115.6	1118.6	1116.3
150°	1141.2	1148.1	1152.8	1156.3	1152.8
152.5°	1177.1	1184.1	1189.9	1194.6	1189.9
155°	1213.1	1216.6	1220.1	1225.9	1222.4
157.5°	1244.5	1246.8	1249.1	1257.2	1251.4
160°	1272.3	1274.7	1275.8	1282.8	1278.1
162.5°	1297.9	1297.9	1299.0	1307.2	1301.4
165°	1319.9	1318.8	1318.8	1326.9	1321.1
167.5°	1339.7	1336.2	1336.2	1344.3	1338.5
170°	1354.8	1351.3	1350.1	1358.2	1351.3
172.5°	1365.2	1361.7	1360.6	1368.7	1361.7
175°	1373.3	1369.9	1367.5	1375.7	1368.7
177.5°	1378.0	1374.5	1372.2	1379.1	1372.2
180°	1375.7	1375.7	1375.7	1375.7	1375.7

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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	10.30	11.03	11.41	12.14	13.67	13.38	14.11	14.48	15.21	16.74
	3H	11.75	12.42	12.87	13.53	15.07	15.96	16.62	17.07	17.73	19.27
	4H	12.22	12.85	13.35	13.97	15.52	17.21	17.83	18.33	18.95	20.50
	6H	12.50	13.08	13.63	14.20	15.76	18.50	19.08	19.63	20.19	21.75
	8H	12.56	13.11	13.69	14.24	15.80	19.15	19.71	20.28	20.84	22.39
	12H	12.57	13.10	13.71	14.22	15.80	19.87	20.40	21.01	21.53	23.10
4H	2H	11.34	11.97	12.47	13.08	14.63	13.69	14.32	14.82	15.44	16.98
	3H	13.04	13.57	14.17	14.71	16.27	16.47	17.00	17.61	18.14	19.71
	4H	13.65	14.14	14.79	15.27	16.85	17.89	18.38	19.02	19.51	21.09
	6H	14.06	14.49	15.21	15.64	17.21	19.35	19.77	20.49	20.92	22.49
	8H	14.17	14.56	15.31	15.71	17.30	20.10	20.50	21.24	21.64	23.23
	12H	14.20	14.57	15.36	15.72	17.31	20.92	21.28	22.08	22.44	24.03
8H	4H	14.43	14.83	15.58	15.97	17.56	18.02	18.42	19.16	19.56	21.15
	6H	15.06	15.39	16.22	16.58	18.16	19.64	19.97	20.81	21.16	22.74
	8H	15.28	15.57	16.45	16.74	18.34	20.53	20.82	21.70	21.99	23.59
	12H	15.41	15.67	16.58	16.83	18.46	21.52	21.78	22.69	22.94	24.58
12H	4H	14.62	14.99	15.79	16.14	17.74	17.99	18.35	19.15	19.50	21.10
	6H	15.39	15.68	16.56	16.85	18.45	19.67	19.96	20.84	21.12	22.73
	8H	15.69	15.95	16.86	17.11	18.75	20.59	20.85	21.76	22.01	23.65