

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: P997811

Luminaire Tested: SA2XXDIP-B1005D1080UB30-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P997811
REPORT IS A COMBINATION OF REPORTS P983545 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B1005D1080UB30-4F0-XX-W2A-D
Description: Define 2 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

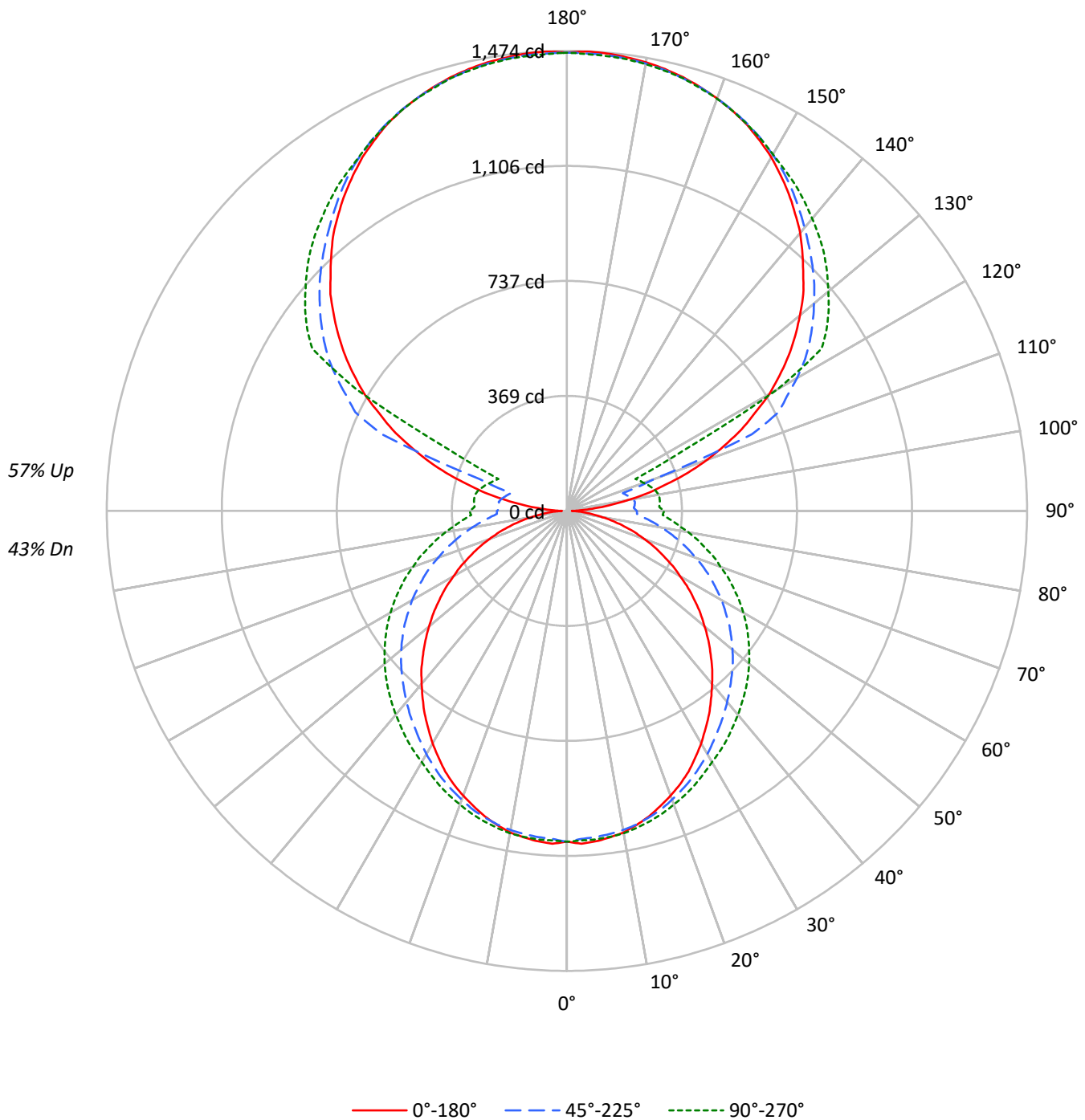
Lumens per Lamp: N/A
Luminaire Lumens: 8351.0 lumens
Efficiency: N/A
Efficacy: 86.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 96.3
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50
1	95	90	86	82	86	82	79	75	68	65	63	54	52	51	42	41	39
2	86	78	71	66	78	71	65	61	59	54	51	47	44	41	36	34	32
3	78	68	60	54	71	62	55	50	51	46	42	41	37	34	32	29	27
4	71	60	52	45	65	55	48	42	45	40	35	36	32	29	28	25	23
5	65	53	45	39	59	49	41	36	40	35	30	32	28	25	25	22	20
6	60	47	39	33	54	44	36	31	36	30	26	29	25	22	23	20	17
7	55	43	35	29	50	39	32	27	33	27	23	26	22	19	21	17	15
8	51	39	31	25	47	36	29	24	30	24	20	24	20	17	19	16	13
9	48	35	28	22	43	32	26	21	27	22	18	22	18	15	17	14	12
10	44	32	25	20	40	30	23	19	25	20	16	20	16	13	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16776	16776	16776
5°	16852	16061	15970
10°	16739	15504	15278
15°	16503	14928	14568
20°	16206	14325	13895
25°	15911	13746	13284
30°	15499	13158	12680
35°	15081	12591	12236
40°	14643	12101	11794
45°	14224	11657	11410
50°	13774	11247	11030
55°	13302	10812	10643
60°	12723	10358	10237
65°	12122	9838	9768
70°	11442	9278	9266
75°	10567	8720	8791
80°	9197	8135	8300
85°	7811	7586	7873

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14224 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.5	1.2
10°-20°	288.2	3.5
20°-30°	436.6	5.2
30°-40°	531.7	6.4
40°-50°	572.0	6.9
50°-60°	555.5	6.7
60°-70°	485.2	5.8
70°-80°	373.4	4.5
80°-90°	252.7	3.0
90°-100°	221.0	2.6
100°-110°	306.5	3.7
110°-120°	561.9	6.7
120°-130°	840.2	10.1
130°-140°	862.7	10.3
140°-150°	787.0	9.4
150°-160°	630.1	7.5
160°-170°	406.0	4.9
170°-180°	139.7	1.7
0°-30°	825.2	9.9
0°-40°	1356.9	16.2
0°-60°	2484.5	29.8
0°-90°	3595.7	43.1
90°-120°	1089.3	13.0
90°-150°	3579.3	42.9
90°-180°	4755.0	56.9
0°-180°	8351.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1060	1060	1060	1060	1060	
5°	1063	1058	1049	1058	1057	101
15°	1014	1017	1017	1031	1029	286
25°	922	932	946	965	969	424
35°	794	820	849	883	894	496
45°	651	693	746	794	810	503
55°	499	554	634	690	710	447
65°	341	416	507	570	590	339
75°	189	275	373	439	459	200
85°	55	150	249	313	335	58
90°	16	117	224	291	311	15
95°	81	118	218	282	299	91
105°	331	407	197	262	284	354
115°	617	652	748	302	242	607
125°	867	881	950	999	1016	774
135°	1070	1087	1112	1155	1165	827
145°	1240	1239	1257	1274	1276	776
155°	1365	1356	1368	1375	1366	629
165°	1438	1432	1435	1443	1435	406
175°	1471	1464	1466	1474	1463	140
180°	1468	1468	1468	1468	1468	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1059.8	1059.8	1059.8	1059.8	1059.8
2.5°	1067.5	1062.9	1052.2	1059.8	1056.8
5°	1062.9	1058.3	1049.1	1058.3	1056.8
7.5°	1055.2	1052.2	1044.5	1055.2	1053.7
10°	1046.0	1042.9	1038.3	1050.6	1049.1
12.5°	1030.7	1032.2	1029.1	1041.4	1039.9
15°	1013.8	1016.8	1016.8	1030.7	1029.1
17.5°	992.3	998.4	1003.0	1016.8	1016.8
20°	970.8	978.4	984.6	1001.5	1001.5
22.5°	947.7	956.9	966.1	983.0	986.1
25°	921.6	932.4	946.2	964.6	969.2
27.5°	890.9	907.8	923.1	946.2	949.3
30°	860.2	880.1	900.1	924.7	929.3
32.5°	826.4	849.4	874.0	903.2	912.4
35°	794.1	820.2	849.4	883.2	894.0
37.5°	758.8	788.0	824.8	861.7	872.5
40°	723.5	757.3	798.7	838.7	852.5
42.5°	689.7	723.5	772.6	817.2	831.0
45°	651.3	692.7	746.5	794.1	809.5
47.5°	614.4	658.9	720.4	769.5	786.4
50°	576.0	623.6	692.7	745.0	761.9
52.5°	539.1	589.8	663.6	717.3	735.7
55°	499.2	554.5	634.4	689.7	709.6
57.5°	460.8	522.2	602.1	662.0	682.0
60°	419.3	485.4	572.9	631.3	652.8
62.5°	382.5	451.6	539.1	602.1	622.1
65°	341.0	416.3	506.9	569.9	589.8
67.5°	304.1	382.5	474.6	537.6	559.1
70°	264.2	344.1	439.3	505.3	523.8
72.5°	227.3	310.3	407.0	471.6	494.6
75°	188.9	274.9	373.3	439.3	459.3
77.5°	152.1	241.2	341.0	407.0	428.5
80°	115.2	208.9	308.7	373.3	394.8
82.5°	84.5	176.6	278.0	342.5	362.5
85°	55.3	150.5	248.8	313.3	334.8
87.5°	33.8	126.0	224.3	287.2	307.2
90°	16.5	117.1	224.0	290.8	311.3
92.5°	40.4	117.5	214.4	276.4	296.0
95°	81.4	118.5	218.0	281.7	299.1
97.5°	135.1	114.0	220.1	280.1	299.6
100°	198.8	110.1	214.2	279.5	298.5
102.5°	267.4	315.9	205.5	272.5	292.6
105°	330.7	407.0	196.9	262.4	283.5
107.5°	406.1	469.5	188.2	252.2	273.4
110°	476.7	529.9	298.0	241.0	262.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	544.7	588.5	641.1	232.3	252.4
115°	617.0	651.9	747.7	301.8	242.2
117.5°	678.2	711.7	794.3	688.5	425.4
120°	748.3	770.4	851.0	906.7	780.2
122.5°	807.8	826.3	904.4	952.2	967.2
125°	866.8	880.7	949.9	998.9	1015.9
127.5°	922.1	935.4	992.8	1041.8	1056.7
130°	974.1	989.5	1033.5	1082.1	1093.3
132.5°	1027.3	1039.5	1074.3	1119.1	1130.4
135°	1070.3	1087.3	1112.2	1155.2	1165.2
137.5°	1117.0	1129.8	1148.1	1187.9	1195.5
140°	1162.7	1169.7	1184.5	1218.6	1222.6
142.5°	1201.0	1206.9	1220.7	1247.6	1250.0
145°	1239.8	1238.8	1256.8	1273.5	1275.9
147.5°	1274.9	1271.7	1289.8	1296.6	1296.9
150°	1308.9	1301.5	1318.5	1324.8	1319.5
152.5°	1337.6	1329.1	1345.0	1351.4	1344.0
155°	1365.2	1355.6	1368.4	1374.8	1366.3
157.5°	1387.5	1379.0	1388.6	1396.0	1387.5
160°	1406.6	1400.3	1406.6	1413.0	1405.6
162.5°	1423.6	1417.3	1422.6	1430.0	1420.4
165°	1438.5	1432.1	1435.3	1442.8	1435.3
167.5°	1450.2	1443.8	1447.0	1454.4	1444.9
170°	1459.8	1453.4	1455.5	1462.9	1453.4
172.5°	1466.1	1459.8	1461.9	1469.3	1459.8
175°	1471.4	1464.0	1466.1	1473.6	1462.9
177.5°	1473.6	1466.1	1467.2	1474.6	1465.1
180°	1468.3	1468.3	1468.3	1468.3	1468.3

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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	14.34	15.18	15.34	16.20	17.57	17.42	18.26	18.42	19.28	20.64
	3H	15.80	16.56	16.81	17.59	18.97	20.00	20.76	21.02	21.80	23.18
	4H	16.27	17.00	17.30	18.03	19.42	21.26	21.98	22.28	23.01	24.40
	6H	16.56	17.23	17.59	18.26	19.67	22.55	23.22	23.59	24.26	25.66
	8H	16.62	17.26	17.66	18.31	19.71	23.21	23.85	24.25	24.90	26.30
	12H	16.63	17.24	17.68	18.29	19.71	23.93	24.54	24.98	25.59	27.02
4H	2H	15.39	16.11	16.42	17.15	18.54	17.74	18.47	18.78	19.50	20.89
	3H	17.09	17.71	18.14	18.77	20.17	20.53	21.15	21.57	22.21	23.61
	4H	17.72	18.28	18.76	19.33	20.76	21.95	22.51	23.00	23.57	24.99
	6H	18.13	18.62	19.19	19.70	21.12	23.42	23.91	24.47	24.98	26.40
	8H	18.24	18.70	19.30	19.77	21.20	24.17	24.63	25.23	25.70	27.14
	12H	18.28	18.70	19.36	19.78	21.22	25.00	25.42	26.08	26.50	27.94
8H	4H	18.50	18.97	19.56	20.03	21.47	22.09	22.55	23.15	23.62	25.06
	6H	19.14	19.52	20.22	20.63	22.06	23.72	24.11	24.80	25.22	26.65
	8H	19.36	19.70	20.45	20.79	22.24	24.61	24.95	25.70	26.04	27.50
	12H	19.49	19.79	20.58	20.88	22.37	25.60	25.91	26.69	26.99	28.48
12H	4H	18.70	19.12	19.78	20.20	21.64	22.06	22.48	23.14	23.57	25.01
	6H	19.47	19.81	20.56	20.91	22.36	23.74	24.09	24.83	25.18	26.63
	8H	19.77	20.08	20.87	21.17	22.66	24.67	24.98	25.76	26.06	27.55