

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: P997812

Luminaire Tested: SA2XXDIP-B1005D1080UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P997812
REPORT IS A COMBINATION OF REPORTS P983546 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-D1
Description: Define 2 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

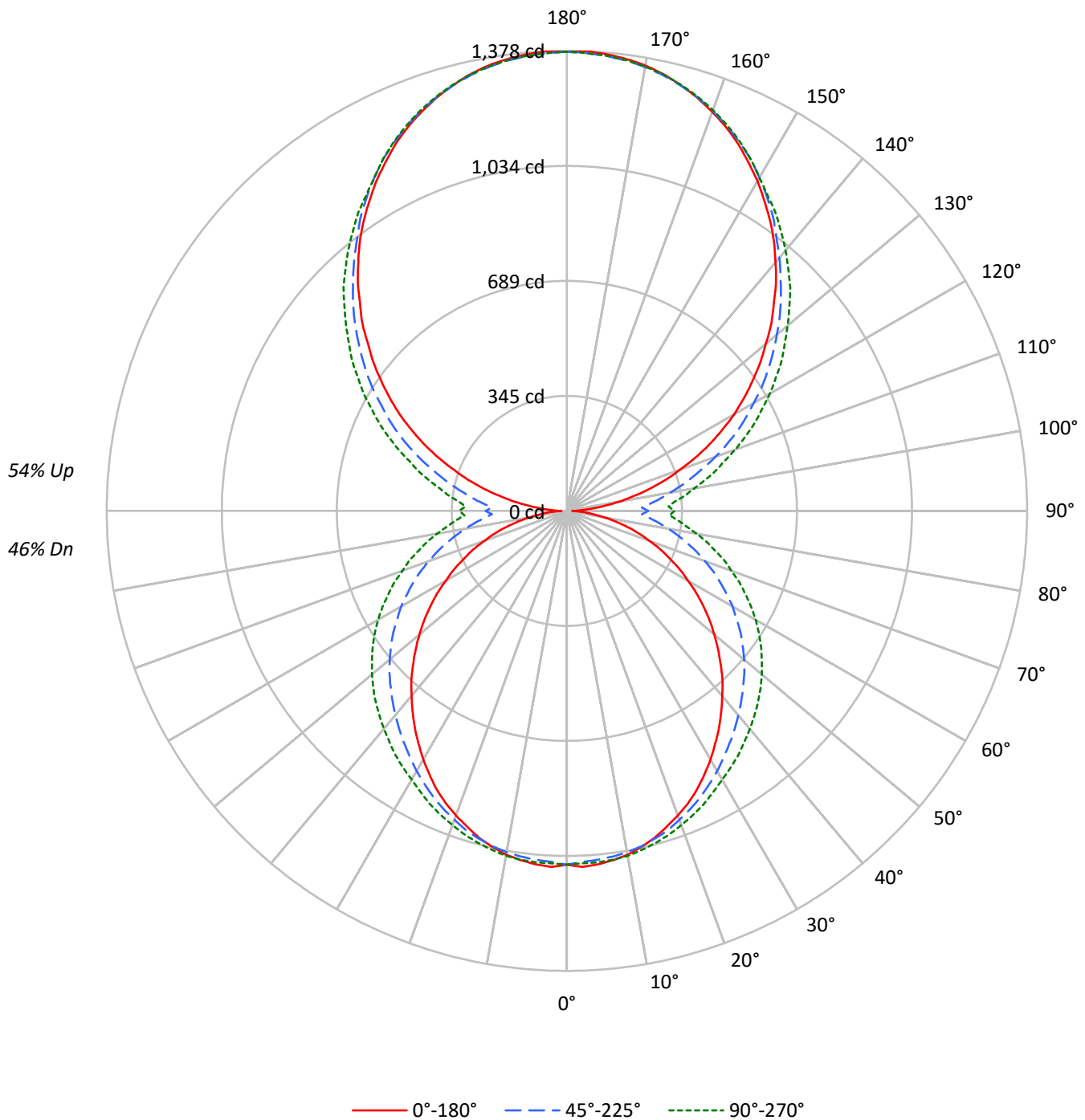
Lumens per Lamp: N/A
Luminaire Lumens: 7893.9 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52
1	95	91	86	82	87	83	79	76	69	66	64	56	54	52	44	42	41
2	86	78	72	66	79	72	66	61	59	55	51	48	45	42	38	36	34
3	78	68	61	54	71	63	56	50	52	47	43	42	38	35	33	30	28
4	71	60	52	46	65	55	48	42	46	40	36	37	33	30	29	26	24
5	65	53	45	39	60	49	42	36	41	35	31	33	29	26	26	23	20
6	60	48	39	33	55	44	36	31	37	31	27	30	26	22	24	20	18
7	56	43	35	29	51	40	32	27	33	27	23	27	23	19	22	18	16
8	51	39	31	25	47	36	29	24	30	25	20	25	20	17	20	16	14
9	48	35	28	23	44	33	26	21	28	22	18	23	18	15	18	15	13
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	14	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	1.3
10°-20°	288.2	3.7
20°-30°	436.6	5.5
30°-40°	531.7	6.7
40°-50°	572.0	7.2
50°-60°	555.5	7.0
60°-70°	485.2	6.1
70°-80°	373.4	4.7
80°-90°	254.0	3.2
90°-100°	257.6	3.3
100°-110°	396.5	5.0
110°-120°	546.1	6.9
120°-130°	655.1	8.3
130°-140°	702.8	8.9
140°-150°	673.4	8.5
150°-160°	562.1	7.1
160°-170°	372.8	4.7
170°-180°	130.3	1.7
0°-30°	825.2	10.5
0°-40°	1356.9	17.2
0°-60°	2484.5	31.5
0°-90°	3597.1	45.6
90°-120°	1200.2	15.2
90°-150°	3231.6	40.9
90°-180°	4297.0	54.4
0°-180°	7893.9	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°	17	120	243	302	322	15
95°	73	156	251	309	325	77
105°	257	305	388	444	460	272
115°	470	494	561	606	620	465
125°	679	689	735	773	786	607
135°	876	888	906	937	946	677
145°	1061	1069	1076	1086	1090	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°	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°	16.6	119.5	243.4	302.5	322.1
92.5°	39.3	130.0	224.9	285.9	304.4
95°	72.7	156.5	250.9	309.3	325.4
97.5°	111.8	188.2	282.0	338.8	357.3
100°	158.2	224.3	313.8	370.6	386.3
102.5°	205.4	263.1	350.6	407.1	422.8
105°	257.3	305.3	387.5	443.6	460.5
107.5°	310.7	352.1	428.9	482.4	493.5
110°	360.2	397.9	473.1	522.3	535.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	415.9	447.5	517.0	562.6	577.2
115°	470.5	494.3	561.2	606.0	619.5
117.5°	523.5	545.1	603.8	646.4	658.2
120°	578.1	593.6	645.7	688.7	702.1
122.5°	628.0	641.1	692.2	730.1	741.7
125°	678.7	689.2	734.8	772.8	785.5
127.5°	729.8	741.0	777.8	811.6	821.9
130°	777.4	790.9	820.9	855.5	863.0
132.5°	830.8	840.8	865.1	894.6	903.4
135°	875.7	888.4	906.1	937.3	946.0
137.5°	926.7	937.2	947.2	975.2	981.4
140°	972.0	981.0	989.9	1014.4	1019.0
142.5°	1018.4	1027.4	1030.9	1050.4	1053.5
145°	1061.1	1069.2	1076.1	1086.5	1089.6
147.5°	1100.5	1111.0	1115.6	1119.4	1119.4
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	14.59	15.45	15.57	16.46	17.79	17.66	18.53	18.65	19.53	20.86
	3H	16.05	16.83	17.04	17.84	19.19	20.25	21.04	21.25	22.05	23.40
	4H	16.52	17.27	17.53	18.29	19.64	21.51	22.25	22.51	23.27	24.62
	6H	16.81	17.50	17.83	18.52	19.89	22.80	23.49	23.82	24.51	25.88
	8H	16.87	17.53	17.89	18.56	19.93	23.46	24.12	24.48	25.16	26.52
	12H	16.88	17.51	17.91	18.54	19.94	24.19	24.82	25.22	25.85	27.24
4H	2H	15.64	16.38	16.65	17.40	18.76	17.99	18.74	19.01	19.75	21.11
	3H	17.35	17.98	18.37	19.02	20.39	20.78	21.42	21.81	22.46	23.83
	4H	17.97	18.55	19.00	19.59	20.98	22.20	22.78	23.23	23.82	25.21
	6H	18.38	18.89	19.42	19.95	21.34	23.67	24.18	24.71	25.24	26.62
	8H	18.49	18.97	19.53	20.02	21.42	24.43	24.90	25.47	25.95	27.36
	12H	18.54	18.97	19.60	20.04	21.45	25.26	25.69	26.31	26.75	28.16
8H	4H	18.76	19.23	19.80	20.29	21.69	22.35	22.82	23.39	23.87	25.28
	6H	19.39	19.79	20.46	20.88	22.28	23.98	24.37	25.04	25.47	26.87
	8H	19.61	19.97	20.68	21.04	22.46	24.87	25.22	25.94	26.30	27.72
	12H	19.75	20.06	20.82	21.13	22.59	25.86	26.17	26.93	27.25	28.71
12H	4H	18.96	19.39	20.02	20.46	21.87	22.32	22.75	23.38	23.82	25.23
	6H	19.73	20.08	20.80	21.16	22.58	24.00	24.35	25.07	25.43	26.85
	8H	20.03	20.34	21.11	21.42	22.88	24.93	25.24	26.00	26.32	27.78