

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: P998703

Luminaire Tested: SA2XXDIP-B675D1080UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P998703
REPORT IS A COMBINATION OF REPORTS P984446 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B675D1080UB30-4F0-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

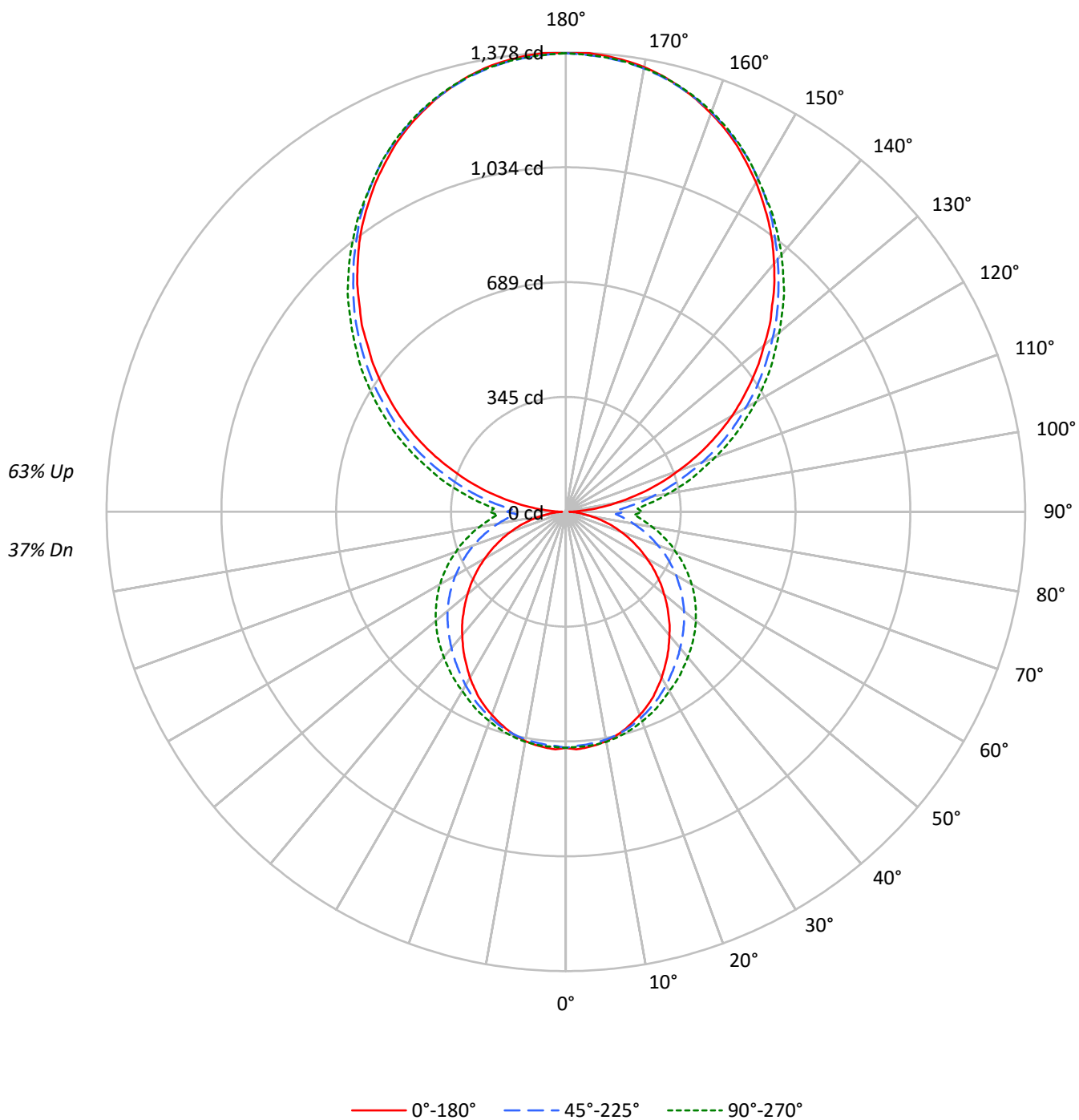
Lumens per Lamp: N/A
Luminaire Lumens: 6552.0 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 70.9
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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44
1	94	89	85	81	85	81	77	74	65	62	60	50	49	47	37	36	35
2	85	77	71	65	76	70	64	60	56	52	49	44	41	38	32	30	28
3	77	67	60	54	69	61	54	49	49	44	40	38	35	32	28	26	24
4	70	59	51	45	63	54	47	41	43	38	34	34	30	27	25	22	20
5	64	53	44	38	58	48	41	35	39	33	29	30	26	23	22	19	17
6	59	47	39	33	53	43	35	30	35	29	25	27	23	20	20	17	15
7	55	42	34	29	49	38	31	26	31	26	22	24	21	18	18	15	13
8	51	38	30	25	46	35	28	23	28	23	19	22	18	16	17	14	12
9	47	35	27	22	42	32	25	20	26	21	17	20	17	14	15	13	11
10	44	32	25	20	40	29	23	18	24	19	15	19	15	12	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11209	11209	11209
5°	11260	10732	10671
10°	11184	10360	10209
15°	11026	9975	9734
20°	10827	9570	9284
25°	10631	9185	8876
30°	10355	8791	8472
35°	10077	8412	8175
40°	9784	8086	7880
45°	9503	7789	7624
50°	9204	7516	7369
55°	8886	7225	7111
60°	8503	6921	6840
65°	8098	6573	6527
70°	7644	6199	6192
75°	7060	5826	5874
80°	6148	5436	5546
85°	5212	5071	5260

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9503 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.1	1.0
10°-20°	192.5	2.9
20°-30°	291.7	4.5
30°-40°	355.2	5.4
40°-50°	382.2	5.8
50°-60°	371.2	5.7
60°-70°	324.2	4.9
70°-80°	249.5	3.8
80°-90°	171.0	2.6
90°-100°	200.4	3.1
100°-110°	354.7	5.4
110°-120°	518.5	7.9
120°-130°	639.8	9.8
130°-140°	696.4	10.6
140°-150°	672.3	10.3
150°-160°	562.1	8.6
160°-170°	372.8	5.7
170°-180°	130.3	2.0
0°-30°	551.4	8.4
0°-40°	906.6	13.8
0°-60°	1660.0	25.3
0°-90°	2404.7	36.7
90°-120°	1073.6	16.4
90°-150°	3082.0	47.0
90°-180°	4147.0	63.3
0°-180°	6552.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	708	708	708	708	708	
5°	710	707	701	707	706	67
15°	677	679	679	689	688	191
25°	616	623	632	644	648	283
35°	531	548	568	590	597	332
45°	435	463	499	531	541	336
55°	334	370	424	461	474	298
65°	228	278	339	381	394	226
75°	126	184	249	294	307	134
85°	37	101	166	209	224	39
90°	12	85	176	215	228	11
95°	69	128	192	231	241	74
105°	255	288	344	382	393	269
115°	468	487	531	560	568	463
125°	678	688	718	742	750	606
135°	875	888	900	921	926	677
145°	1061	1069	1076	1084	1084	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°	708.1	708.1	708.1	708.1	708.1
2.5°	713.3	710.2	703.0	708.1	706.1
5°	710.2	707.1	701.0	707.1	706.1
7.5°	705.1	703.0	697.9	705.1	704.0
10°	698.9	696.8	693.8	702.0	701.0
12.5°	688.6	689.7	687.6	695.8	694.8
15°	677.3	679.4	679.4	688.6	687.6
17.5°	663.0	667.1	670.2	679.4	679.4
20°	648.6	653.7	657.8	669.1	669.1
22.5°	633.2	639.4	645.5	656.8	658.9
25°	615.8	623.0	632.2	644.5	647.6
27.5°	595.2	606.5	616.8	632.2	634.2
30°	574.7	588.1	601.4	617.8	620.9
32.5°	552.1	567.5	584.0	603.5	609.6
35°	530.6	548.0	567.5	590.1	597.3
37.5°	507.0	526.5	551.1	575.7	582.9
40°	483.4	506.0	533.7	560.4	569.6
42.5°	460.8	483.4	516.2	546.0	555.2
45°	435.1	462.9	498.8	530.6	540.9
47.5°	410.5	440.3	481.3	514.2	525.5
50°	384.9	416.7	462.9	497.7	509.0
52.5°	360.2	394.1	443.4	479.3	491.6
55°	333.5	370.5	423.9	460.8	474.1
57.5°	307.9	348.9	402.3	442.3	455.7
60°	280.2	324.3	382.8	421.8	436.2
62.5°	255.5	301.7	360.2	402.3	415.6
65°	227.8	278.1	338.7	380.8	394.1
67.5°	203.2	255.5	317.1	359.2	373.6
70°	176.5	229.9	293.5	337.6	350.0
72.5°	151.9	207.3	272.0	315.1	330.5
75°	126.2	183.7	249.4	293.5	306.9
77.5°	101.6	161.1	227.8	272.0	286.3
80°	77.0	139.6	206.3	249.4	263.8
82.5°	56.4	118.0	185.8	228.9	242.2
85°	36.9	100.6	166.3	209.4	223.7
87.5°	22.6	84.2	149.8	191.9	205.3
90°	11.5	84.9	176.1	214.8	228.3
92.5°	34.7	98.4	162.2	203.4	215.7
95°	68.6	128.4	192.3	231.3	241.3
97.5°	108.2	162.7	226.9	264.9	277.2
100°	154.6	201.9	262.8	300.8	310.9
102.5°	202.4	243.2	303.2	341.4	351.5
105°	254.7	288.0	343.7	381.9	393.2
107.5°	308.1	337.4	388.7	424.8	430.3
110°	358.2	385.6	435.9	468.8	476.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	413.9	437.3	483.3	512.7	521.7
115°	468.5	486.7	530.6	560.2	568.1
117.5°	522.0	539.5	576.8	604.1	610.8
120°	576.6	590.0	621.7	650.5	658.3
122.5°	626.5	639.1	671.3	695.5	702.4
125°	677.7	688.2	717.5	741.7	749.8
127.5°	728.8	740.5	763.5	784.6	790.3
130°	776.4	790.4	809.7	832.0	835.5
132.5°	829.8	840.3	856.9	874.7	879.4
135°	875.2	887.9	900.5	920.9	925.7
137.5°	926.2	936.7	944.2	962.5	965.0
140°	971.5	981.0	988.9	1005.3	1006.7
142.5°	1017.9	1027.4	1030.9	1044.3	1044.8
145°	1061.1	1069.2	1076.1	1083.5	1084.0
147.5°	1100.5	1111.0	1115.6	1118.9	1117.4
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	12.25	13.04	13.30	14.10	15.55	15.33	16.11	16.38	17.18	18.62
	3H	13.71	14.42	14.77	15.49	16.95	17.91	18.62	18.97	19.69	21.16
	4H	14.18	14.86	15.25	15.93	17.40	19.16	19.84	20.24	20.91	22.38
	6H	14.46	15.08	15.54	16.16	17.64	20.45	21.08	21.54	22.16	23.64
	8H	14.52	15.11	15.60	16.21	17.68	21.11	21.71	22.20	22.80	24.28
	12H	14.53	15.10	15.62	16.19	17.69	21.83	22.40	22.93	23.49	24.99
4H	2H	13.29	13.97	14.37	15.04	16.51	15.65	16.32	16.73	17.40	18.87
	3H	15.00	15.57	16.08	16.67	18.15	18.43	19.01	19.52	20.11	21.59
	4H	15.62	16.14	16.71	17.23	18.74	19.85	20.38	20.94	21.47	22.97
	6H	16.03	16.48	17.13	17.60	19.09	21.31	21.77	22.41	22.88	24.38
	8H	16.13	16.56	17.23	17.67	19.18	22.07	22.50	23.17	23.60	25.11
	12H	16.17	16.56	17.29	17.68	19.20	22.89	23.28	24.01	24.40	25.92
8H	4H	16.40	16.83	17.50	17.93	19.45	19.99	20.41	21.09	21.52	23.03
	6H	17.03	17.39	18.15	18.54	20.04	21.61	21.97	22.74	23.12	24.63
	8H	17.25	17.57	18.38	18.69	20.22	22.50	22.82	23.63	23.95	25.47
	12H	17.38	17.66	18.51	18.79	20.35	23.49	23.77	24.63	24.90	26.46
12H	4H	16.59	16.98	17.71	18.10	19.62	19.96	20.35	21.08	21.47	22.98
	6H	17.36	17.68	18.49	18.81	20.34	21.64	21.95	22.76	23.08	24.61
	8H	17.66	17.94	18.80	19.07	20.63	22.56	22.84	23.70	23.97	25.53