

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: P1032589

Luminaire Tested: S124DIW-B1195D470UB2750-4F0-XX-W2A-D1_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032589
REPORT IS A COMBINATION OF REPORTS P997163 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D470UB2750-4F0-XX-W2A-D1_5000K
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

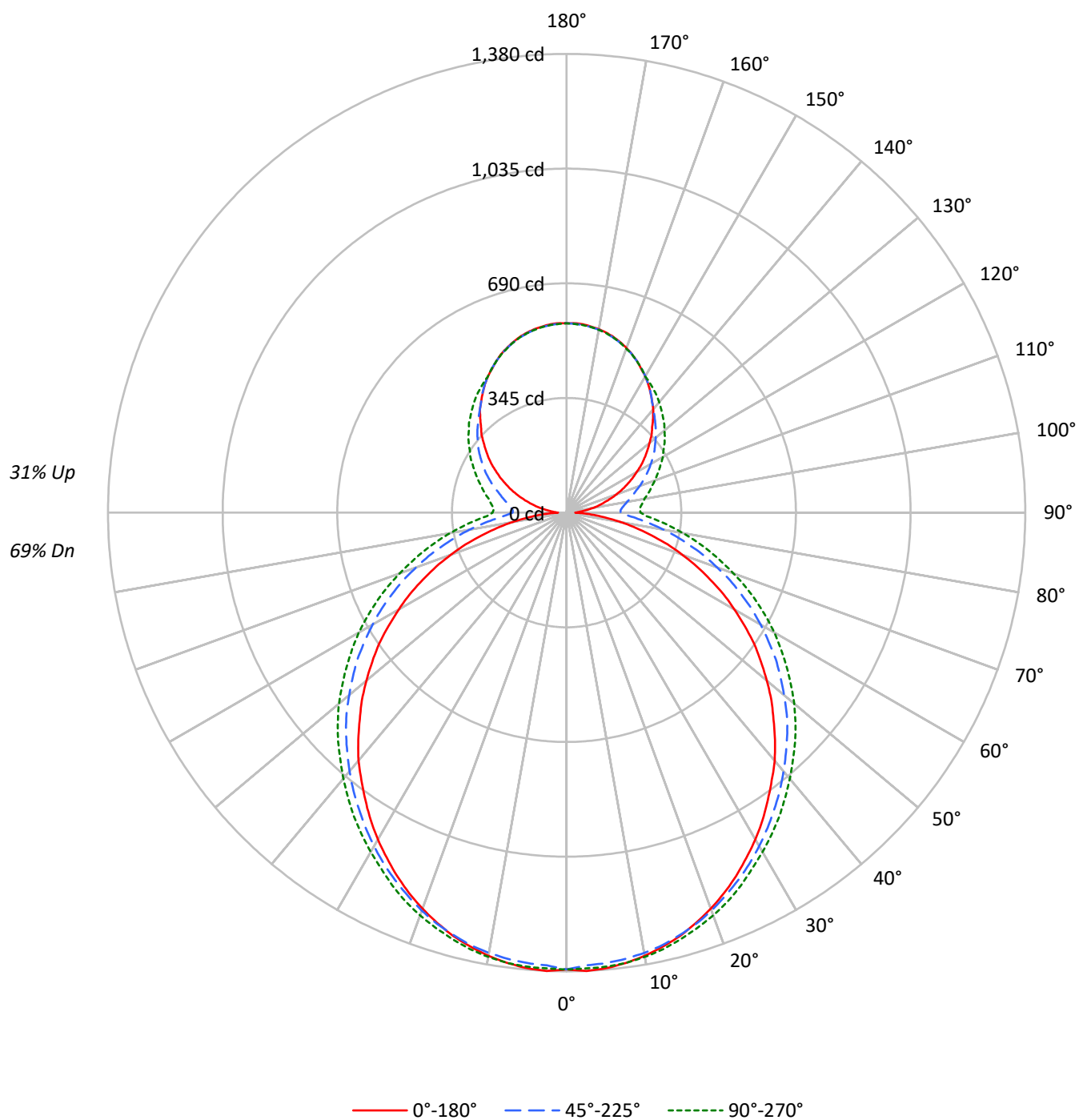
Lumens per Lamp: N/A
Luminaire Lumens: 6267.0 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 74.5
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	112	112	112	112	106	106	106	106	94	94	94	83	83	83	74	74	74
1	101	96	91	87	95	90	86	83	80	77	74	71	69	67	63	61	60
2	91	83	76	70	86	78	72	67	70	65	61	62	58	55	55	52	49
3	83	72	64	58	78	68	61	55	61	55	50	54	50	46	48	44	41
4	76	64	55	48	71	60	52	46	54	48	42	48	43	39	43	38	35
5	69	57	48	41	65	54	46	40	48	42	36	43	38	33	38	34	30
6	64	51	42	36	60	48	40	34	43	37	32	39	33	29	35	30	26
7	59	46	37	31	55	44	36	30	39	33	28	35	30	26	31	27	23
8	55	42	33	28	52	40	32	27	36	29	25	32	27	23	29	24	21
9	51	38	30	25	48	36	29	24	33	27	22	30	24	20	27	22	19
10	48	35	27	22	45	33	26	21	30	24	20	27	22	19	25	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11205	11205	11205
5°	11236	10913	10933
10°	11163	10699	10668
15°	11059	10457	10369
20°	10904	10196	10078
25°	10729	9908	9765
30°	10541	9622	9446
35°	10327	9330	9162
40°	10156	9050	8867
45°	9903	8787	8607
50°	9686	8488	8332
55°	9463	8201	8017
60°	9117	7842	7719
65°	8735	7456	7361
70°	8272	7013	6947
75°	7628	6522	6553
80°	6897	6023	6141
85°	5938	5520	5806

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9903 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	2.1
10°-20°	373.1	6.0
20°-30°	564.1	9.0
30°-40°	682.4	10.9
40°-50°	721.4	11.5
50°-60°	678.9	10.8
60°-70°	563.4	9.0
70°-80°	395.4	6.3
80°-90°	224.1	3.6
90°-100°	169.8	2.7
100°-110°	209.5	3.3
110°-120°	254.9	4.1
120°-130°	286.3	4.6
130°-140°	296.0	4.7
140°-150°	278.3	4.4
150°-160°	231.4	3.7
160°-170°	153.9	2.5
170°-180°	53.9	0.9
0°-30°	1067.3	17.0
0°-40°	1749.7	27.9
0°-60°	3150.1	50.3
0°-90°	4332.9	69.1
90°-120°	634.2	10.1
90°-150°	1494.8	23.9
90°-180°	1934.0	30.9
0°-180°	6267.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1374	1374	1374	1374	1374	
5°	1376	1371	1360	1373	1371	131
15°	1319	1320	1316	1330	1328	372
25°	1206	1216	1220	1237	1239	556
35°	1056	1074	1090	1111	1116	661
45°	880	909	939	965	972	680
55°	689	722	768	799	808	614
65°	477	526	579	617	629	473
75°	265	322	386	429	443	281
85°	82	146	215	262	277	85
90°	26	92	162	209	222	19
95°	46	101	167	210	224	45
105°	116	148	206	246	260	125
115°	201	215	264	297	307	199
125°	286	284	322	351	359	255
135°	364	367	377	401	409	282
145°	440	440	441	449	454	275
155°	502	502	502	504	502	231
165°	547	546	545	547	546	154
175°	569	567	566	569	566	54
180°	570	570	570	570	570	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1374.1	1374.1	1374.1	1374.1	1374.1
2.5°	1380.3	1375.7	1363.4	1374.1	1372.6
5°	1375.7	1371.1	1360.3	1372.6	1371.1
7.5°	1366.4	1363.4	1354.1	1368.0	1366.4
10°	1354.1	1352.6	1344.9	1358.8	1357.2
12.5°	1337.2	1337.2	1332.6	1344.9	1344.9
15°	1318.7	1320.3	1315.7	1329.5	1328.0
17.5°	1294.1	1298.7	1297.2	1311.0	1309.5
20°	1268.0	1272.6	1274.1	1289.5	1289.5
22.5°	1238.7	1244.9	1248.0	1263.3	1266.4
25°	1206.4	1215.6	1220.3	1237.2	1238.7
27.5°	1171.0	1184.9	1191.0	1206.4	1207.9
30°	1135.6	1147.9	1158.7	1175.6	1178.7
32.5°	1097.2	1112.5	1124.9	1144.9	1147.9
35°	1055.6	1074.1	1089.5	1111.0	1115.6
37.5°	1014.1	1035.6	1054.1	1075.6	1080.2
40°	974.1	994.1	1015.6	1038.7	1044.8
42.5°	927.9	951.0	977.1	1003.3	1007.9
45°	880.2	909.4	938.7	964.8	972.5
47.5°	835.6	864.8	898.7	924.8	934.0
50°	786.3	820.2	854.0	884.8	894.0
52.5°	737.1	770.9	810.9	841.7	850.9
55°	689.4	721.7	767.9	798.6	807.9
57.5°	635.5	675.5	720.2	757.1	764.8
60°	583.2	623.2	674.0	709.4	721.7
62.5°	532.4	577.0	627.8	663.2	675.5
65°	477.0	526.3	578.6	617.1	629.4
67.5°	424.7	477.0	532.4	570.9	583.2
70°	370.8	423.2	481.6	523.2	534.0
72.5°	318.5	372.4	435.5	475.5	487.8
75°	264.7	321.6	386.2	429.3	443.2
77.5°	213.9	273.9	341.6	384.7	400.1
80°	167.7	229.3	297.0	343.1	355.5
82.5°	121.6	186.2	253.9	301.6	315.5
85°	81.6	146.2	215.4	261.6	277.0
87.5°	50.8	113.9	181.6	226.2	240.1
90°	25.9	92.4	162.0	209.3	222.5
92.5°	34.6	94.1	162.5	206.9	219.6
95°	46.4	101.2	167.4	210.2	224.1
97.5°	60.8	108.9	175.5	217.3	231.1
100°	78.6	120.3	184.3	226.8	237.6
102.5°	98.9	133.2	195.2	236.5	249.3
105°	116.5	147.7	206.5	246.2	259.8
107.5°	138.1	164.7	219.0	259.2	269.6
110°	158.6	181.1	234.4	268.9	282.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.0	198.4	248.3	282.2	294.5
115°	201.3	215.2	263.5	297.0	307.2
117.5°	222.9	232.2	277.9	308.8	319.9
120°	243.0	249.4	292.6	321.2	334.4
122.5°	265.5	265.9	307.0	336.4	345.0
125°	286.0	284.4	322.5	350.8	359.2
127.5°	305.8	305.5	335.5	362.3	372.6
130°	325.4	325.2	349.8	376.6	384.1
132.5°	347.0	346.3	364.3	389.6	398.4
135°	364.0	366.6	377.3	401.1	409.0
137.5°	384.7	384.4	391.5	413.3	421.4
140°	405.4	404.7	406.3	425.8	433.1
142.5°	422.7	423.6	421.7	438.6	444.8
145°	439.9	440.2	440.6	449.4	454.3
147.5°	457.5	458.2	457.8	458.9	464.6
150°	473.4	473.7	473.7	473.7	473.2
152.5°	486.9	487.8	488.2	489.5	488.2
155°	502.3	502.3	501.9	503.6	501.9
157.5°	515.5	514.6	514.6	516.0	514.6
160°	527.0	526.5	526.1	527.4	525.2
162.5°	537.6	536.2	535.8	538.4	536.2
165°	546.8	545.5	544.6	547.3	545.5
167.5°	554.3	552.5	552.5	555.2	552.5
170°	560.5	558.3	558.7	561.4	558.3
172.5°	564.9	563.1	563.1	566.2	563.1
175°	568.8	566.6	566.2	569.3	566.2
177.5°	570.6	568.4	568.4	571.5	568.0
180°	569.7	569.7	569.7	569.7	569.7

(END OF REPORT)