

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: P1033379

Luminaire Tested: S124DIW-B1195D770UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033379
REPORT IS A COMBINATION OF REPORTS P997273 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D770UB50-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

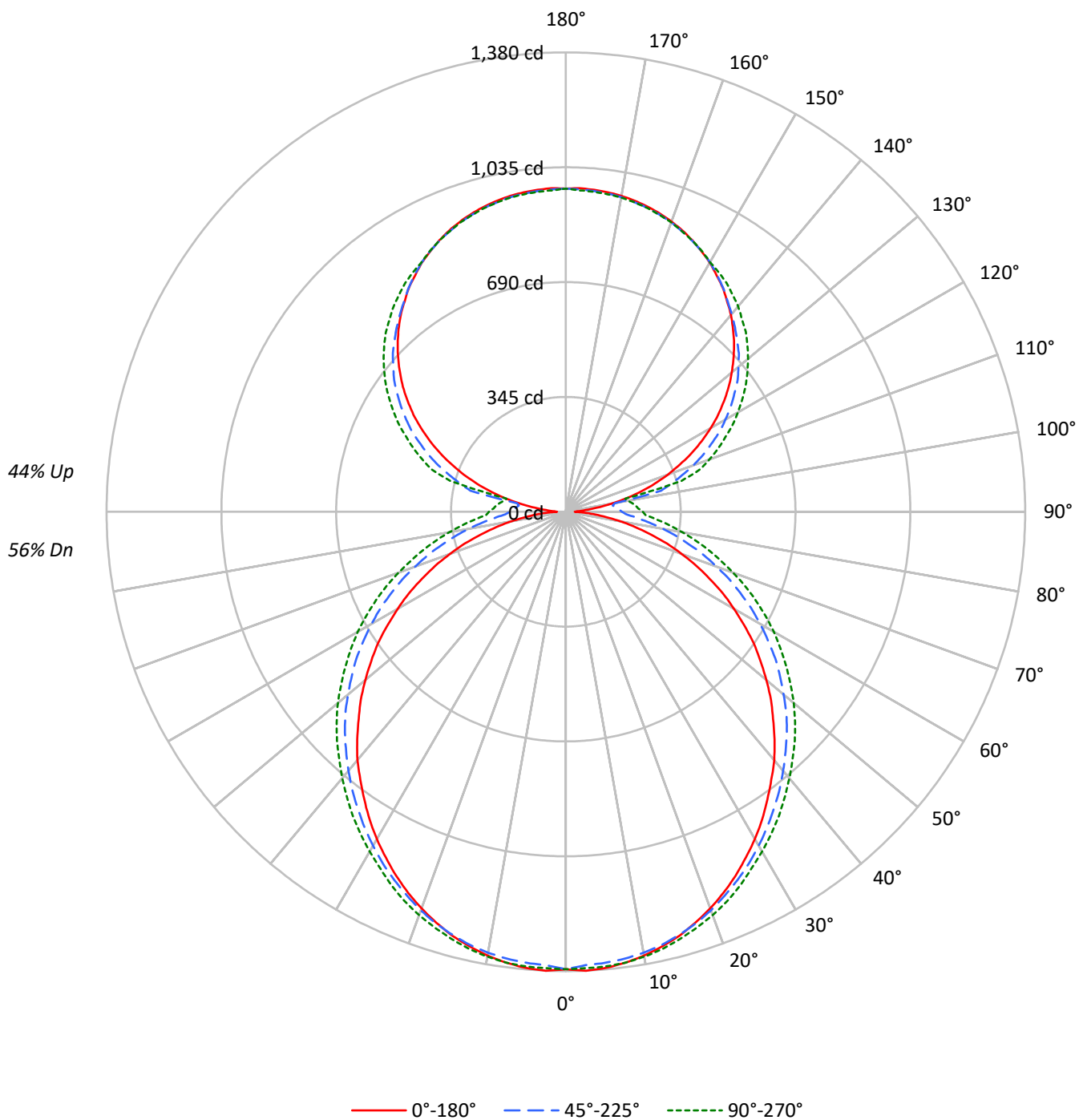
Lumens per Lamp: N/A
Luminaire Lumens: 7691.0 lumens
Efficiency: N/A
Efficacy: 91.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 84.5
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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	98	93	89	85	91	87	83	79	75	72	69	63	61	59	53	51	50
2	89	81	74	68	82	75	69	64	65	60	56	55	52	49	46	43	41
3	81	71	63	56	75	66	59	53	57	51	47	48	44	41	40	37	35
4	74	62	54	47	68	58	51	45	50	44	39	43	38	34	36	32	29
5	68	55	47	40	62	52	44	38	45	39	34	38	33	30	32	28	25
6	62	49	41	35	57	46	39	33	40	34	29	34	30	26	29	25	22
7	57	45	36	31	53	42	34	29	36	30	26	31	26	23	26	23	20
8	53	40	32	27	49	38	31	26	33	27	23	29	24	20	24	20	18
9	50	37	29	24	46	35	28	23	30	24	20	26	21	18	22	19	16
10	46	34	26	21	43	32	25	20	28	22	18	24	20	16	21	17	14

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	1.7
10°-20°	373.1	4.9
20°-30°	564.1	7.3
30°-40°	682.4	8.9
40°-50°	721.4	9.4
50°-60°	678.9	8.8
60°-70°	563.4	7.3
70°-80°	395.4	5.1
80°-90°	224.9	2.9
90°-100°	164.9	2.1
100°-110°	310.5	4.0
110°-120°	471.2	6.1
120°-130°	551.6	7.2
130°-140°	566.4	7.4
140°-150°	517.8	6.7
150°-160°	415.0	5.4
160°-170°	267.6	3.5
170°-180°	92.2	1.2
0°-30°	1067.3	13.9
0°-40°	1749.7	22.7
0°-60°	3150.1	41.0
0°-90°	4333.7	56.3
90°-120°	946.6	12.3
90°-150°	2582.4	33.6
90°-180°	3357.0	43.6
0°-180°	7691.0	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°	27	96	168	217	231	19
95°	60	86	150	196	210	65
105°	232	268	328	373	359	244
115°	417	433	482	517	528	411
125°	580	581	618	650	660	518
135°	715	714	728	754	764	551
145°	822	823	823	833	840	514
155°	900	900	898	901	899	415
165°	949	945	945	951	945	268
175°	971	966	967	974	965	92
180°	971	971	971	971	971	

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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°	26.8	96.4	168.3	217.3	231.1
92.5°	34.0	86.3	158.3	205.8	218.1
95°	59.9	86.0	149.9	195.7	210.4
97.5°	94.7	155.3	142.2	185.8	200.3
100°	136.0	189.1	148.8	178.1	189.6
102.5°	183.9	226.5	293.7	170.4	182.7
105°	232.4	267.5	328.1	373.1	359.2
107.5°	279.6	307.9	366.9	408.9	422.6
110°	326.0	349.8	407.9	444.8	459.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	370.9	393.7	446.0	479.1	494.3
115°	417.3	433.3	481.8	517.2	527.9
117.5°	460.1	472.3	520.6	552.2	564.6
120°	502.2	509.7	553.6	585.8	596.7
122.5°	542.8	544.3	587.2	618.8	628.1
125°	579.8	581.1	618.2	649.6	659.6
127.5°	616.9	616.0	650.4	677.4	687.5
130°	650.8	650.1	676.8	705.3	714.5
132.5°	683.5	683.5	704.8	731.7	740.2
135°	714.7	714.0	727.6	753.7	764.4
137.5°	743.7	742.1	752.0	776.5	783.5
140°	772.0	771.9	774.9	797.1	805.6
142.5°	795.9	798.8	798.0	816.3	822.5
145°	822.0	822.7	822.7	832.6	840.3
147.5°	842.3	845.2	844.5	846.7	853.6
150°	864.8	866.2	865.5	865.5	866.2
152.5°	882.2	884.4	882.9	884.4	883.7
155°	899.6	900.4	898.2	901.1	898.9
157.5°	914.9	914.9	912.0	915.6	912.0
160°	928.0	925.8	925.1	929.4	925.1
162.5°	939.6	936.7	935.9	940.3	935.2
165°	949.0	945.4	945.4	951.2	944.7
167.5°	957.0	953.4	952.6	959.2	951.9
170°	963.5	959.2	959.9	965.7	958.5
172.5°	967.9	963.5	964.3	970.1	962.1
175°	970.8	966.4	967.2	973.7	965.0
177.5°	973.0	967.9	969.3	975.2	966.4
180°	970.8	970.8	970.8	970.8	970.8

(END OF REPORT)