

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: P1033380

Luminaire Tested: S124DIW-B1195D770UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033380
REPORT IS A COMBINATION OF REPORTS P997274 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-D1
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

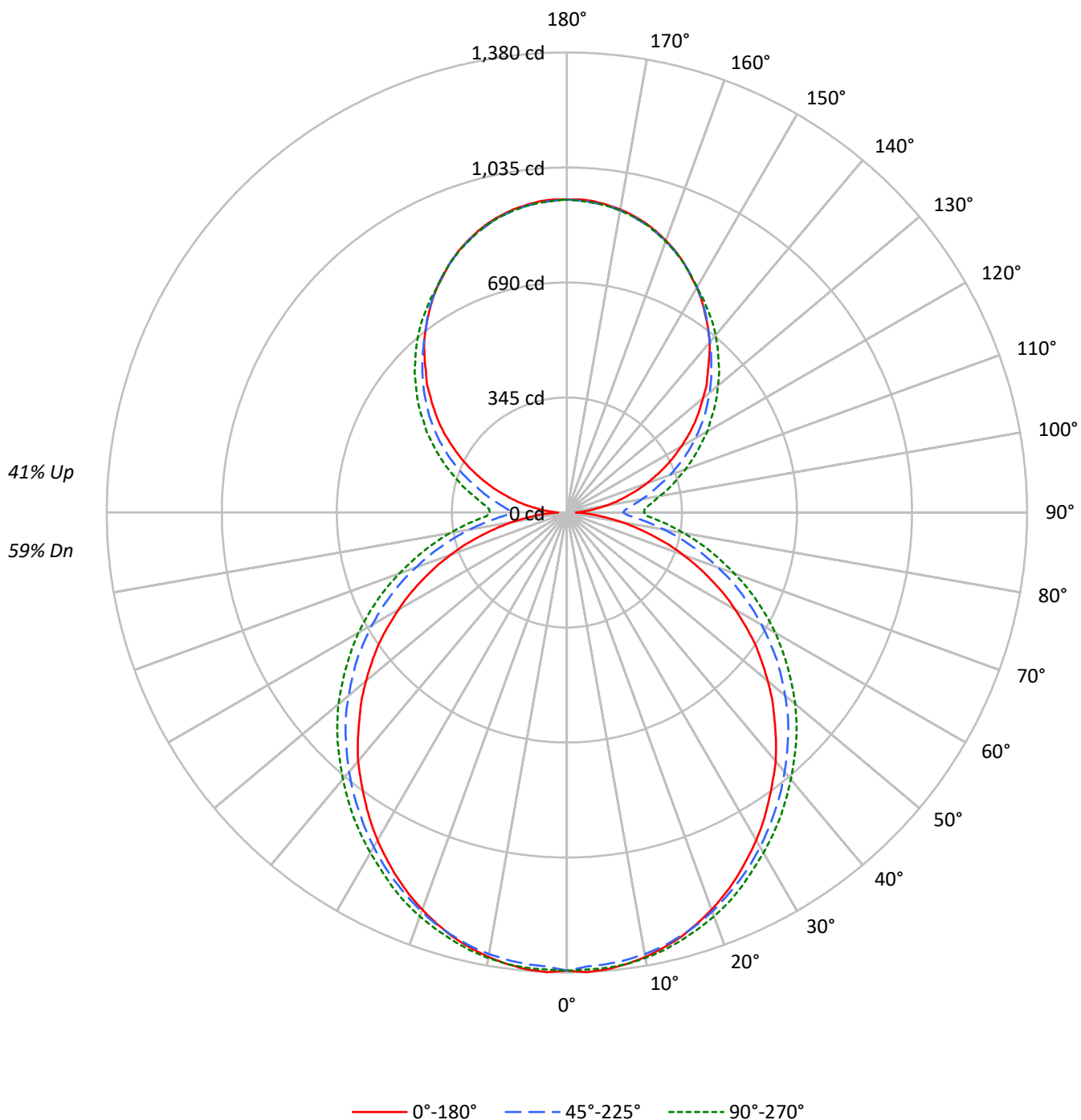
Lumens per Lamp: N/A
Luminaire Lumens: 7291.0 lumens
Efficiency: N/A
Efficacy: 86.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	102	102	102	102	89	89	89	76	76	76	65	65	65
1	99	94	89	85	92	88	84	80	76	73	70	65	63	61	55	54	52
2	89	81	74	69	83	76	70	65	66	61	57	57	53	50	48	45	43
3	81	71	63	57	75	66	59	54	58	52	48	50	45	42	42	39	36
4	74	63	54	48	69	59	51	45	51	45	40	44	39	35	37	34	31
5	68	56	47	41	63	52	44	39	45	39	34	39	34	31	34	30	27
6	63	50	41	35	58	47	39	33	41	35	30	35	30	27	30	26	23
7	58	45	37	31	54	42	35	29	37	31	26	32	27	23	28	24	21
8	54	41	33	27	50	38	31	26	34	28	23	29	24	21	25	21	18
9	50	37	29	24	46	35	28	23	31	25	21	27	22	19	23	19	17
10	47	34	27	22	43	32	25	21	28	23	19	25	20	17	22	18	15

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	1.8
10°-20°	373.1	5.1
20°-30°	564.1	7.7
30°-40°	682.4	9.4
40°-50°	721.4	9.9
50°-60°	678.9	9.3
60°-70°	563.4	7.7
70°-80°	395.4	5.4
80°-90°	224.9	3.1
90°-100°	193.9	2.7
100°-110°	281.5	3.9
110°-120°	377.2	5.2
120°-130°	447.6	6.1
130°-140°	477.1	6.5
140°-150°	456.3	6.3
150°-160°	381.2	5.2
160°-170°	253.6	3.5
170°-180°	88.8	1.2
0°-30°	1067.3	14.6
0°-40°	1749.7	24.0
0°-60°	3150.1	43.2
0°-90°	4333.7	59.4
90°-120°	852.6	11.7
90°-150°	2233.7	30.6
90°-180°	2957.0	40.6
0°-180°	7291.0	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	20
95°	64	121	189	233	247	63
105°	183	214	274	315	329	195
115°	326	340	387	420	430	322
125°	467	466	503	531	539	417
135°	598	602	613	636	643	463
145°	724	725	726	734	738	453
155°	827	827	827	830	827	381
165°	901	899	897	902	899	254
175°	937	933	933	938	933	89
180°	938	938	938	938	938	

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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°	42.0	105.2	175.0	220.3	233.3
95°	63.5	120.9	189.1	232.7	246.6
97.5°	88.2	138.6	207.5	250.4	264.2
100°	118.5	161.4	228.0	271.0	281.8
102.5°	151.9	186.5	250.8	293.0	306.0
105°	182.9	214.4	274.3	314.9	329.4
107.5°	218.5	245.4	300.0	341.3	351.4
110°	253.3	276.3	329.4	363.4	377.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	289.5	307.9	357.3	391.2	403.5
115°	325.7	339.6	387.3	420.5	430.5
117.5°	361.2	370.5	415.9	446.0	456.2
120°	395.3	402.8	445.2	472.4	486.1
122.5°	432.3	433.0	473.8	502.4	509.6
125°	467.1	465.5	503.3	531.0	538.9
127.5°	499.8	500.3	529.7	555.9	566.0
130°	533.0	533.7	558.3	584.5	590.8
132.5°	568.6	568.5	586.2	610.9	619.4
135°	597.6	601.9	612.6	635.9	642.9
137.5°	631.7	632.2	639.9	660.8	669.2
140°	665.8	665.6	667.2	686.5	693.5
142.5°	695.4	696.8	694.6	711.5	717.7
145°	723.7	725.1	725.8	734.3	738.3
147.5°	752.7	754.9	754.1	754.9	760.4
150°	778.9	780.3	780.3	780.3	779.5
152.5°	802.0	803.5	804.2	806.4	804.2
155°	827.4	827.4	826.7	829.6	826.7
157.5°	849.2	847.8	847.8	849.9	847.8
160°	868.1	867.4	866.6	868.8	865.2
162.5°	885.5	883.3	882.6	887.0	883.3
165°	900.8	898.6	897.1	901.5	898.6
167.5°	913.1	910.2	910.2	914.5	910.2
170°	923.3	919.6	920.4	924.7	919.6
172.5°	930.5	927.6	927.6	932.7	927.6
175°	937.0	933.4	932.7	937.8	932.7
177.5°	940.0	936.3	936.3	941.4	935.6
180°	938.5	938.5	938.5	938.5	938.5

(END OF REPORT)