

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: P1032593

Luminaire Tested: S124DIW-B1195D470UB2750-4F0-XX-W2A-D_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032593
REPORT IS A COMBINATION OF REPORTS P997169 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-D_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

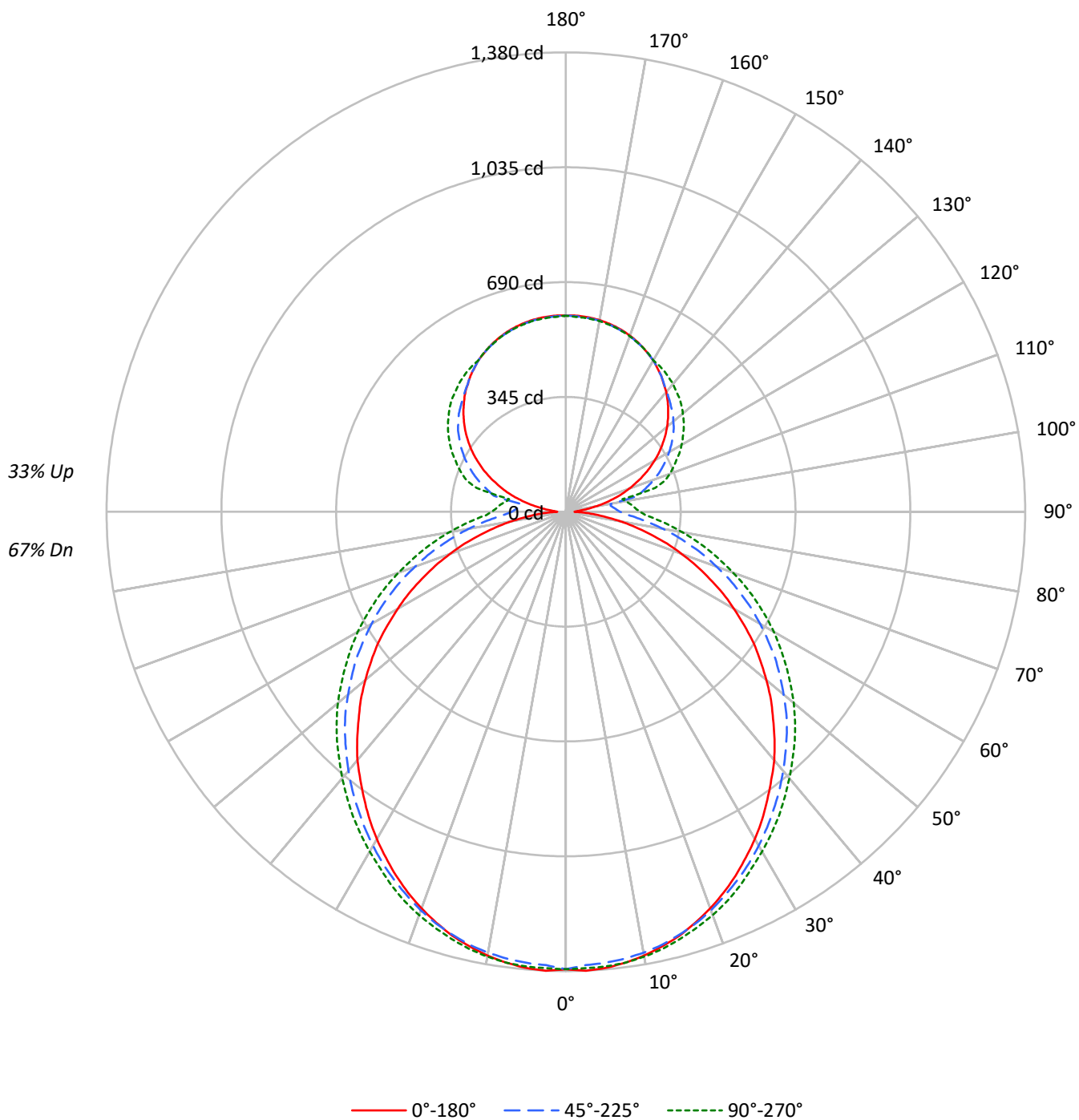
Lumens per Lamp: N/A
Luminaire Lumens: 6509.0 lumens
Efficiency: N/A
Efficacy: 87.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	50	30	10
RCR																				
0	111	111	111	111	105	105	105	105	93	93	93	81	81	81	71	71	71	67		
1	100	95	91	87	94	90	86	82	79	76	73	70	67	65	61	59	58	53		
2	91	82	75	70	85	78	71	66	69	64	60	60	57	53	53	50	47	44		
3	82	72	64	57	77	68	61	55	60	54	50	53	48	45	46	43	40	36		
4	75	63	55	48	70	60	52	46	53	47	42	47	42	38	41	37	34	31		
5	69	56	48	41	64	53	45	39	47	41	36	42	37	33	37	33	29	26		
6	63	51	42	36	59	48	40	34	43	36	31	38	33	28	33	29	26	23		
7	59	46	37	31	55	43	35	30	39	32	27	34	29	25	30	26	23	20		
8	54	41	33	28	51	39	32	26	35	29	24	31	26	22	28	24	20	18		
9	51	38	30	25	48	36	29	24	32	26	22	29	24	20	26	21	18	16		
10	47	35	27	22	45	33	26	21	30	24	20	27	22	18	24	20	17	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	2.0
10°-20°	373.1	5.7
20°-30°	564.1	8.7
30°-40°	682.4	10.5
40°-50°	721.4	11.1
50°-60°	678.9	10.4
60°-70°	563.4	8.7
70°-80°	395.4	6.1
80°-90°	224.1	3.4
90°-100°	152.3	2.3
100°-110°	227.0	3.5
110°-120°	311.8	4.8
120°-130°	349.3	5.4
130°-140°	350.0	5.4
140°-150°	315.4	4.8
150°-160°	251.8	3.9
160°-170°	162.4	2.5
170°-180°	56.0	0.9
0°-30°	1067.3	16.4
0°-40°	1749.7	26.9
0°-60°	3150.1	48.4
0°-90°	4332.9	66.6
90°-120°	691.1	10.6
90°-150°	1705.9	26.2
90°-180°	2176.0	33.4
0°-180°	6509.0	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	18
95°	44	80	144	188	202	46
105°	146	180	239	281	278	154
115°	257	272	321	356	366	253
125°	354	354	392	423	432	317
135°	435	434	447	472	483	336
145°	499	499	499	509	516	312
155°	546	546	545	547	545	252
165°	576	574	574	577	573	163
175°	589	586	587	591	586	56
180°	589	589	589	589	589	

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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°	29.7	82.6	152.4	198.1	210.4
95°	44.2	80.1	143.6	187.7	202.1
97.5°	64.8	119.1	135.9	178.1	192.3
100°	89.2	137.1	136.3	170.4	181.6
102.5°	118.2	157.4	221.2	162.1	174.4
105°	146.4	179.9	239.1	281.4	277.9
107.5°	175.1	202.6	259.6	300.2	312.7
110°	202.6	225.6	282.0	318.3	331.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	229.3	250.4	302.1	335.5	349.6
115°	256.8	272.0	320.8	355.6	366.3
117.5°	282.8	293.9	341.3	373.1	385.5
120°	307.7	314.1	358.3	389.9	401.4
122.5°	332.4	333.3	375.7	406.9	416.8
125°	354.3	354.4	392.0	422.6	432.3
127.5°	376.7	375.6	408.6	435.8	446.2
130°	396.7	395.7	421.6	449.7	458.9
132.5°	416.6	415.9	436.1	462.7	471.5
135°	434.9	434.4	446.9	472.5	482.6
137.5°	452.5	450.9	459.3	483.3	490.5
140°	469.7	469.0	471.4	492.8	500.9
142.5°	483.5	485.3	484.2	502.0	508.2
145°	499.4	499.2	499.2	508.8	515.9
147.5°	511.7	512.8	512.4	514.3	521.0
150°	525.4	525.6	525.2	525.2	525.6
152.5°	535.3	536.6	535.8	536.6	536.2
155°	545.9	546.3	545.0	546.8	545.4
157.5°	555.1	555.1	553.4	555.6	553.4
160°	563.1	561.8	561.3	564.0	561.3
162.5°	570.1	568.4	567.9	570.6	567.5
165°	575.9	573.6	573.6	577.2	573.2
167.5°	580.7	578.5	578.1	582.0	577.6
170°	584.7	582.0	582.5	586.0	581.6
172.5°	587.3	584.7	585.1	588.6	583.8
175°	589.1	586.4	586.9	590.8	585.5
177.5°	590.4	587.3	588.2	591.7	586.4
180°	589.1	589.1	589.1	589.1	589.1

(END OF REPORT)