

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: P1033589

Luminaire Tested: S124DIW-B575D1340UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033589
REPORT IS A COMBINATION OF REPORTS P997739 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D1340UB50-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

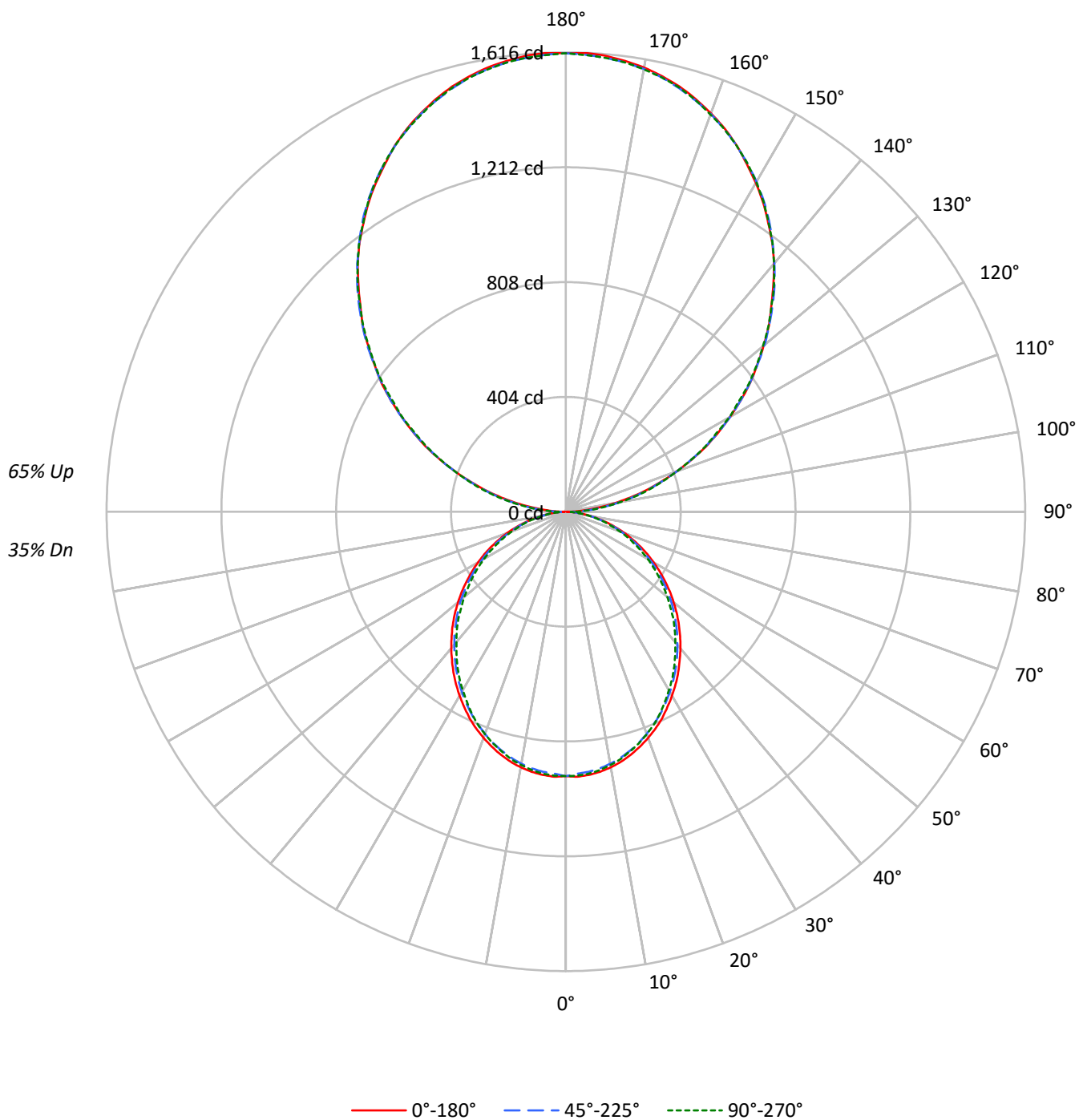
Lumens per Lamp: N/A
Luminaire Lumens: 6866.0 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 66.1
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	75	75	75	58	58	58	42	42	42
1	94	90	86	83	85	82	78	75	66	63	61	51	49	48	37	36	36
2	86	79	73	68	77	71	66	62	57	54	51	45	42	40	33	31	30
3	78	69	62	56	70	63	57	52	51	46	43	39	36	34	29	27	25
4	72	61	53	47	64	55	49	44	45	40	36	35	32	29	26	24	22
5	66	54	46	41	59	49	42	37	40	35	31	31	28	25	23	21	19
6	60	49	41	35	54	44	37	32	36	31	27	28	25	22	21	19	17
7	56	44	36	31	50	40	33	28	33	27	24	26	22	19	19	17	15
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	18	15	13
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	16	14	12
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7584	7584	7584
5°	7589	7366	7375
10°	7526	7161	7111
15°	7417	6918	6813
20°	7280	6655	6506
25°	7125	6377	6174
30°	6937	6077	5811
35°	6744	5769	5459
40°	6541	5438	5085
45°	6330	5106	4735
50°	6095	4785	4348
55°	5841	4408	3963
60°	5579	3997	3563
65°	5282	3572	3111
70°	4937	3059	2627
75°	4424	2467	2104
80°	3771	1783	1480
85°	2925	992	797

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6330 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.7	1.3
10°-20°	247.0	3.6
20°-30°	363.4	5.3
30°-40°	422.5	6.2
40°-50°	422.5	6.2
50°-60°	369.5	5.4
60°-70°	274.3	4.0
70°-80°	155.6	2.3
80°-90°	48.0	0.7
90°-100°	105.1	1.5
100°-110°	314.9	4.6
110°-120°	535.0	7.8
120°-130°	705.6	10.3
130°-140°	792.5	11.5
140°-150°	778.9	11.3
150°-160°	655.1	9.5
160°-170°	435.9	6.3
170°-180°	152.6	2.2
0°-30°	698.1	10.2
0°-40°	1120.5	16.3
0°-60°	1912.5	27.9
0°-90°	2390.4	34.8
90°-120°	955.0	13.9
90°-150°	3232.0	47.1
90°-180°	4476.0	65.2
0°-180°	6866.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	930	930	930	930	930	
5°	929	926	918	926	925	88
15°	884	882	870	875	873	249
25°	801	796	785	786	783	369
35°	689	684	674	668	665	431
45°	563	557	546	537	535	434
55°	426	423	413	404	399	381
65°	288	285	277	270	266	285
75°	154	150	146	143	142	163
85°	40	40	39	39	38	43
90°	4	18	27	35	37	8
95°	75	86	95	99	99	81
105°	291	292	297	301	304	308
115°	544	544	541	540	539	536
125°	792	792	791	788	786	706
135°	1022	1029	1029	1027	1023	790
145°	1241	1246	1248	1246	1242	777
155°	1422	1422	1421	1426	1421	654
165°	1548	1544	1542	1549	1544	437
175°	1610	1604	1603	1612	1603	153
180°	1613	1613	1613	1613	1613	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	930.0	930.0	930.0	930.0	930.0
2.5°	933.0	930.7	922.5	930.0	929.2
5°	929.2	926.3	918.1	926.3	924.8
7.5°	922.5	919.6	910.6	917.3	916.6
10°	912.9	909.9	900.2	906.1	904.7
12.5°	900.2	897.2	886.8	893.5	891.2
15°	884.5	881.6	870.4	874.8	872.6
17.5°	866.6	862.9	852.5	855.5	854.0
20°	846.5	842.8	831.6	833.9	832.4
22.5°	824.9	819.7	808.5	813.0	810.0
25°	801.1	795.9	785.4	786.2	783.2
27.5°	774.2	769.0	759.3	757.9	754.1
30°	747.4	741.5	731.8	728.8	725.1
32.5°	719.1	713.9	703.5	699.7	696.0
35°	689.3	684.1	673.6	668.4	664.7
37.5°	658.0	653.5	642.3	637.1	631.9
40°	627.4	621.5	610.3	602.9	599.1
42.5°	594.7	591.7	579.0	570.1	567.8
45°	562.6	557.4	545.5	537.3	535.0
47.5°	529.1	525.4	514.2	505.2	499.3
50°	494.8	491.8	481.4	471.0	466.5
52.5°	461.3	457.5	446.4	437.4	431.5
55°	425.5	423.3	412.8	403.9	399.4
57.5°	392.0	389.7	379.3	370.4	365.9
60°	356.9	353.2	343.5	336.8	333.1
62.5°	322.7	319.7	309.3	303.3	299.6
65°	288.4	284.7	277.2	269.8	266.0
67.5°	253.4	250.4	242.9	235.5	234.7
70°	221.3	216.1	210.1	204.2	201.9
72.5°	187.0	181.8	177.4	172.9	170.6
75°	153.5	149.8	146.1	143.1	142.3
77.5°	120.7	119.2	115.5	114.8	112.5
80°	91.7	89.4	87.9	86.4	85.7
82.5°	63.3	62.6	62.6	61.9	61.1
85°	40.2	40.2	38.7	38.7	38.0
87.5°	19.4	18.6	17.9	17.9	17.9
90°	3.7	17.5	27.4	34.9	37.4
92.5°	32.4	48.7	54.9	58.6	59.9
95°	74.9	86.1	94.8	98.6	98.6
97.5°	119.8	129.7	139.7	144.7	144.7
100°	174.7	179.6	190.9	193.4	193.4
102.5°	232.0	233.3	243.3	247.0	248.3
105°	290.7	291.9	296.9	300.6	304.4
107.5°	351.8	353.0	354.3	359.3	358.0
110°	414.2	416.7	415.4	412.9	416.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	479.0	479.0	476.5	476.5	476.5
115°	543.9	543.9	541.4	540.2	538.9
117.5°	605.0	605.0	603.8	600.1	596.3
120°	666.2	671.2	667.4	661.2	663.7
122.5°	729.8	731.0	729.8	726.0	719.8
125°	792.2	792.2	790.9	788.4	785.9
127.5°	848.3	852.0	849.6	847.1	845.8
130°	908.2	911.9	911.9	909.4	904.4
132.5°	969.3	971.8	970.6	968.1	966.8
135°	1021.7	1029.2	1029.2	1026.7	1023.0
137.5°	1080.3	1084.1	1086.6	1082.8	1084.1
140°	1139.0	1141.5	1141.5	1140.2	1139.0
142.5°	1192.6	1195.1	1193.9	1193.9	1193.9
145°	1241.3	1246.3	1247.5	1246.3	1242.5
147.5°	1291.2	1297.4	1296.2	1294.9	1293.7
150°	1336.1	1341.1	1341.1	1341.1	1339.8
152.5°	1378.5	1381.0	1382.2	1386.0	1382.2
155°	1422.2	1422.2	1420.9	1425.9	1420.9
157.5°	1459.6	1457.1	1457.1	1460.8	1457.1
160°	1492.0	1490.8	1489.5	1493.3	1487.0
162.5°	1522.0	1518.2	1517.0	1524.5	1518.2
165°	1548.2	1544.4	1541.9	1549.4	1544.4
167.5°	1569.4	1564.4	1564.4	1571.9	1564.4
170°	1586.8	1580.6	1581.8	1589.3	1580.6
172.5°	1599.3	1594.3	1594.3	1603.0	1594.3
175°	1610.5	1604.3	1603.0	1611.8	1603.0
177.5°	1615.5	1609.3	1609.3	1618.0	1608.0
180°	1613.0	1613.0	1613.0	1613.0	1613.0

(END OF REPORT)