

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: P1033545

Luminaire Tested: S124DIW-B575D1050UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033545
REPORT IS A COMBINATION OF REPORTS P997652 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D1050UB35-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

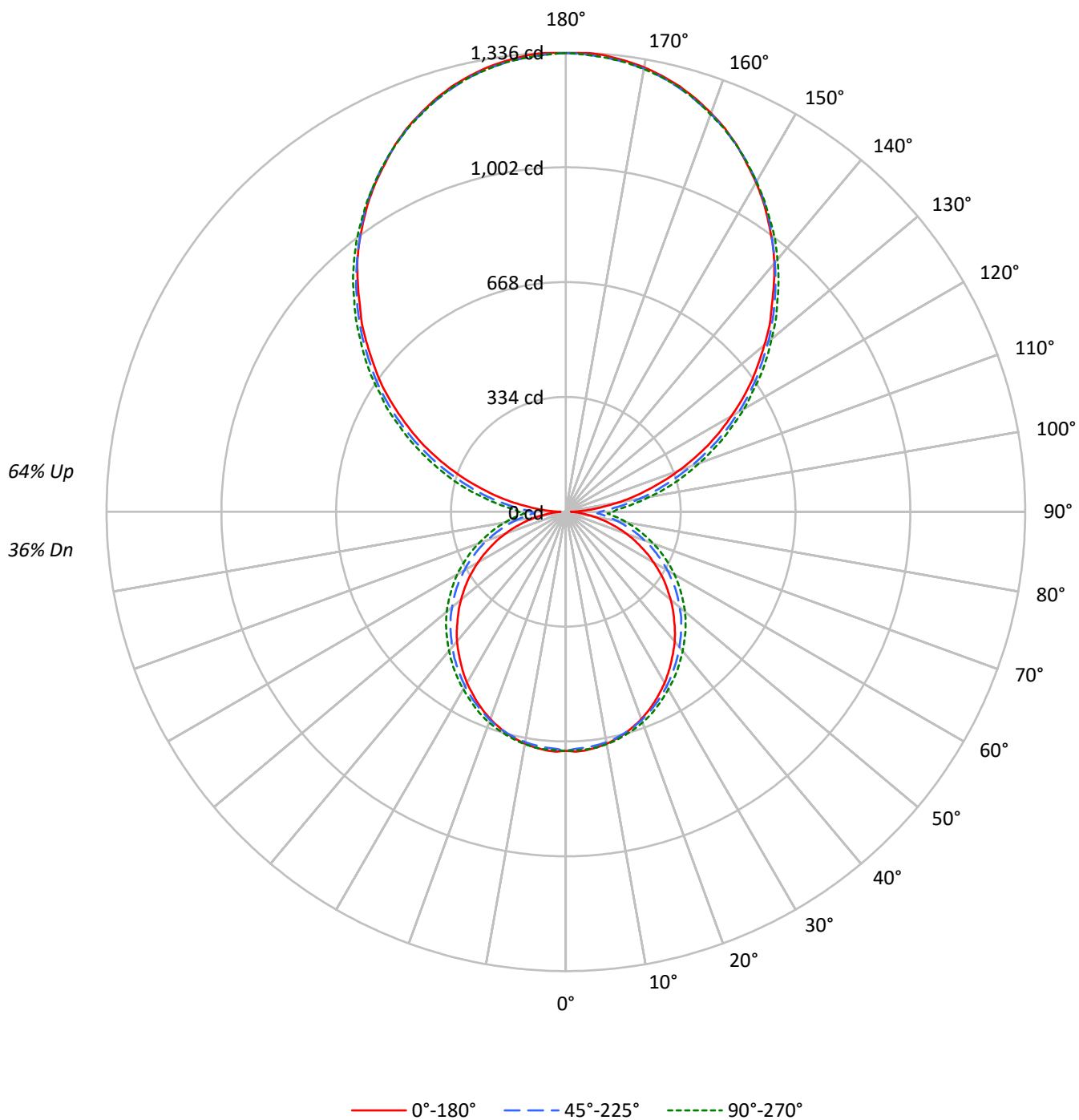
Lumens per Lamp: N/A
Luminaire Lumens: 6075.0 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.5
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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	43	43	43
1	94	89	85	82	85	81	77	74	65	63	60	51	49	47	37	36	35
2	85	78	71	66	77	70	65	60	57	53	49	44	41	39	32	31	29
3	77	68	60	55	70	62	55	50	50	45	41	39	35	33	28	26	24
4	71	60	52	46	64	54	47	42	44	39	35	34	31	28	25	23	21
5	65	53	45	39	58	48	41	36	39	34	30	30	27	24	23	20	18
6	60	47	39	34	54	43	36	31	35	30	26	27	24	21	20	18	16
7	55	43	35	29	49	39	32	27	32	26	22	25	21	18	19	16	14
8	51	39	31	26	46	35	28	24	29	24	20	23	19	16	17	14	12
9	47	35	28	23	43	32	25	21	26	21	18	21	17	14	16	13	11
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5668	5668	5668
5°	5684	5521	5531
10°	5647	5412	5397
15°	5594	5290	5246
20°	5516	5157	5098
25°	5428	5012	4940
30°	5333	4868	4779
35°	5224	4720	4635
40°	5137	4578	4486
45°	5010	4445	4354
50°	4901	4294	4216
55°	4787	4148	4055
60°	4611	3967	3905
65°	4419	3772	3724
70°	4185	3547	3514
75°	3859	3300	3315
80°	3488	3046	3106
85°	3005	2793	2937

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 90°
Luminance: 5088 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.9	1.1
10°-20°	188.7	3.1
20°-30°	285.3	4.7
30°-40°	345.2	5.7
40°-50°	364.9	6.0
50°-60°	343.5	5.7
60°-70°	285.0	4.7
70°-80°	200.0	3.3
80°-90°	115.6	1.9
90°-100°	154.1	2.5
100°-110°	310.2	5.1
110°-120°	475.9	7.8
120°-130°	602.4	9.9
130°-140°	663.6	10.9
140°-150°	645.9	10.6
150°-160°	541.9	8.9
160°-170°	360.6	5.9
170°-180°	126.3	2.1
0°-30°	539.9	8.9
0°-40°	885.1	14.6
0°-60°	1593.5	26.2
0°-90°	2194.1	36.1
90°-120°	940.2	15.5
90°-150°	2852.2	46.9
90°-180°	3881.0	63.9
0°-180°	6075.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	696	694	688	694	694	66
15°	667	668	666	673	672	188
25°	610	615	617	626	627	281
35°	534	543	551	562	564	334
45°	445	460	475	488	492	344
55°	349	365	388	404	409	311
65°	241	266	293	312	318	239
75°	134	163	195	217	224	142
85°	41	74	109	132	140	43
90°	16	58	100	128	137	13
95°	72	107	146	170	177	75
105°	247	264	297	320	329	263
115°	455	462	484	500	505	449
125°	658	658	676	689	691	587
135°	847	853	858	869	870	655
145°	1028	1031	1032	1036	1036	643
155°	1176	1176	1175	1180	1175	541
165°	1281	1278	1276	1282	1278	361
175°	1332	1327	1326	1333	1326	126
180°	1334	1334	1334	1334	1334	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	695.1	695.1	695.1	695.1	695.1
2.5°	698.2	695.9	689.7	695.1	694.4
5°	695.9	693.6	688.1	694.4	693.6
7.5°	691.2	689.7	685.0	692.0	691.2
10°	685.0	684.2	680.3	687.4	686.6
12.5°	676.5	676.5	674.1	680.3	680.3
15°	667.1	667.9	665.6	672.6	671.8
17.5°	654.7	657.0	656.2	663.2	662.4
20°	641.4	643.8	644.5	652.3	652.3
22.5°	626.6	629.7	631.3	639.1	640.6
25°	610.3	615.0	617.3	625.9	626.6
27.5°	592.4	599.4	602.5	610.3	611.1
30°	574.5	580.7	586.2	594.7	596.3
32.5°	555.0	562.8	569.0	579.1	580.7
35°	534.0	543.3	551.1	562.0	564.4
37.5°	513.0	523.9	533.2	544.1	546.5
40°	492.7	502.9	513.8	525.4	528.6
42.5°	469.4	481.1	494.3	507.5	509.9
45°	445.3	460.1	474.8	488.1	492.0
47.5°	422.7	437.5	454.6	467.8	472.5
50°	397.8	414.9	432.0	447.6	452.3
52.5°	372.9	390.0	410.2	425.8	430.5
55°	348.7	365.1	388.4	404.0	408.7
57.5°	321.5	341.7	364.3	383.0	386.9
60°	295.0	315.3	341.0	358.9	365.1
62.5°	269.3	291.9	317.6	335.5	341.7
65°	241.3	266.2	292.7	312.1	318.4
67.5°	214.8	241.3	269.3	288.8	295.0
70°	187.6	214.1	243.6	264.7	270.1
72.5°	161.1	188.4	220.3	240.5	246.8
75°	133.9	162.7	195.4	217.2	224.2
77.5°	108.2	138.6	172.8	194.6	202.4
80°	84.8	116.0	150.2	173.6	179.8
82.5°	61.5	94.2	128.4	152.6	159.6
85°	41.3	74.0	109.0	132.3	140.1
87.5°	25.7	57.6	91.9	114.4	121.4
90°	15.6	58.0	99.8	128.5	136.9
92.5°	38.5	79.1	117.8	142.7	149.9
95°	72.0	107.0	146.1	170.2	177.2
97.5°	108.4	139.2	179.4	203.8	210.8
100°	153.1	177.4	217.1	240.1	245.5
102.5°	200.5	218.7	256.5	279.8	287.1
105°	247.4	264.1	297.0	319.5	328.9
107.5°	298.0	312.2	340.6	364.1	368.6
110°	348.8	361.8	388.0	403.9	413.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	401.7	411.1	434.7	451.8	458.0
115°	454.6	461.6	484.5	500.5	505.0
117.5°	505.2	509.8	532.2	545.4	548.6
120°	555.0	561.4	580.9	591.3	599.6
122.5°	607.6	608.6	628.6	641.1	641.3
125°	658.4	657.6	676.0	688.8	691.4
127.5°	704.8	707.1	720.6	732.6	737.0
130°	753.5	755.9	768.3	780.3	780.8
132.5°	804.1	805.5	813.7	824.9	828.5
135°	846.7	852.9	858.3	868.8	870.3
137.5°	895.3	897.5	902.7	911.3	916.2
140°	943.8	945.0	945.8	954.9	957.8
142.5°	987.3	989.4	987.6	996.2	999.3
145°	1027.6	1030.9	1031.9	1035.6	1035.6
147.5°	1068.8	1073.2	1072.2	1071.9	1074.0
150°	1106.0	1109.3	1109.3	1109.3	1108.3
152.5°	1140.3	1142.3	1143.4	1146.5	1143.4
155°	1176.4	1176.4	1175.4	1179.5	1175.4
157.5°	1207.4	1205.3	1205.3	1208.4	1205.3
160°	1234.2	1233.2	1232.1	1235.2	1230.1
162.5°	1259.0	1255.9	1254.8	1261.0	1255.9
165°	1280.6	1277.5	1275.5	1281.7	1277.5
167.5°	1298.2	1294.0	1294.0	1300.2	1294.0
170°	1312.6	1307.5	1308.5	1314.7	1307.5
172.5°	1322.9	1318.8	1318.8	1326.0	1318.8
175°	1332.2	1327.1	1326.0	1333.3	1326.0
177.5°	1336.3	1331.2	1331.2	1338.4	1330.2
180°	1334.3	1334.3	1334.3	1334.3	1334.3

(END OF REPORT)