

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: P1034034

Luminaire Tested: S124RDIW-B350D1050UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034034
REPORT IS A COMBINATION OF REPORTS P1000294 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B350D1050UB40-4F0-XX-W2A-F
Description: Define 4 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

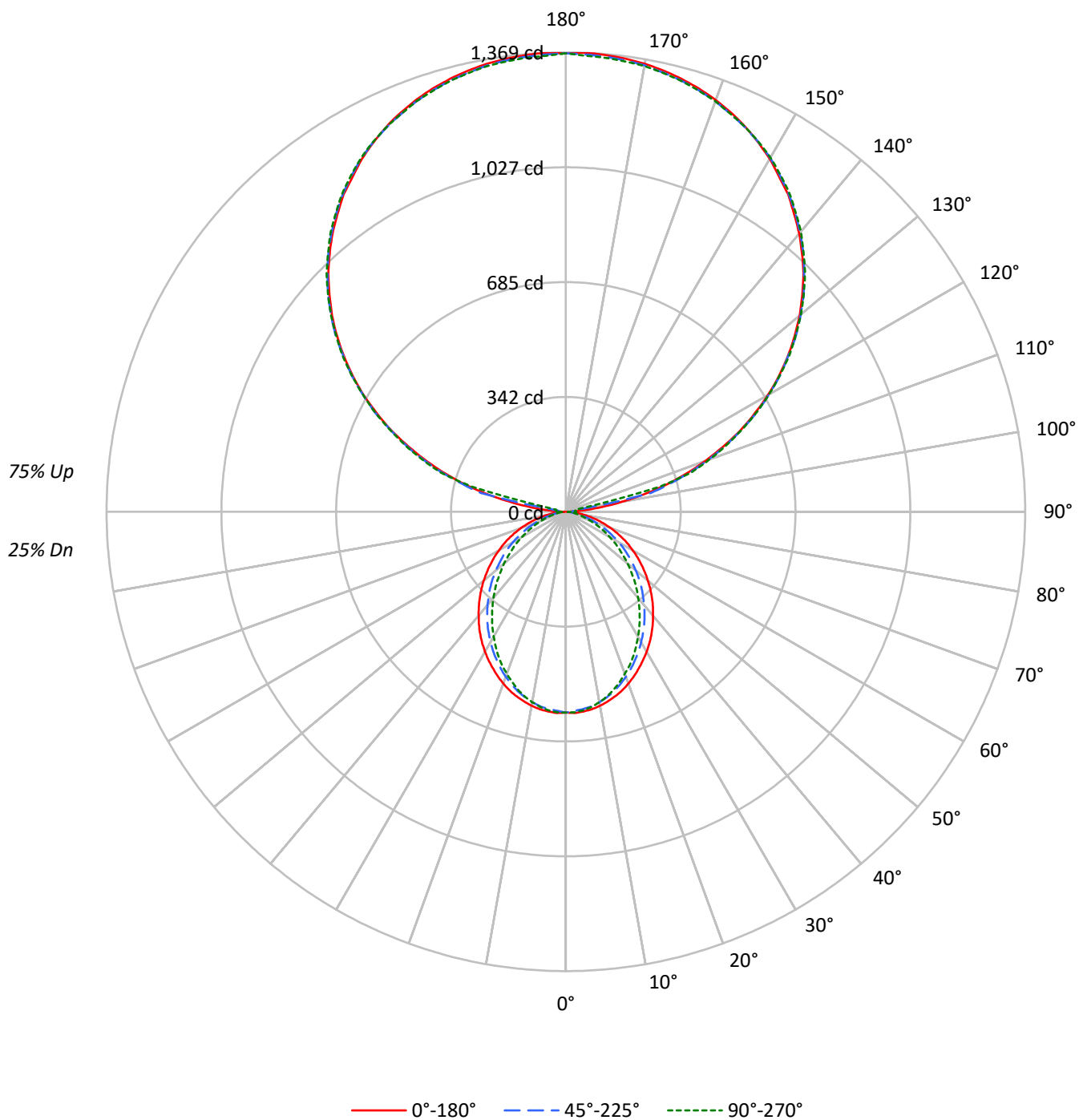
Lumens per Lamp: N/A
Luminaire Lumens: 5613.0 lumens
Efficiency: N/A
Efficacy: 126.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33
1	92	88	84	81	82	79	76	73	61	59	57	44	43	42	29	29	28
2	84	77	71	66	75	69	64	60	53	50	47	39	37	35	26	25	24
3	77	68	61	55	68	61	55	50	47	43	40	35	32	30	23	22	20
4	70	60	52	47	62	54	47	42	42	37	34	31	28	26	21	19	18
5	64	53	46	40	57	48	41	36	37	33	29	28	25	22	19	17	15
6	59	48	40	34	52	43	36	31	34	29	25	25	22	19	17	15	13
7	55	43	35	30	48	39	32	27	30	26	22	23	19	17	15	13	12
8	50	39	31	26	45	35	29	24	28	23	20	21	17	15	14	12	11
9	47	35	28	23	42	32	26	21	25	21	17	19	16	14	13	11	10
10	44	32	25	21	39	29	23	19	23	19	16	17	14	12	12	10	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4880	4880	4880
5°	4881	4736	4737
10°	4840	4586	4531
15°	4773	4400	4291
20°	4686	4188	4016
25°	4578	3959	3747
30°	4471	3726	3445
35°	4354	3489	3150
40°	4214	3235	2847
45°	4084	2981	2547
50°	3935	2705	2242
55°	3775	2423	1928
60°	3597	2122	1617
65°	3425	1777	1318
70°	3179	1415	1008
75°	2867	1030	705
80°	2394	633	506
85°	1797	364	279

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4084 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.3	1.0
10°-20°	156.9	2.8
20°-30°	226.6	4.0
30°-40°	256.8	4.6
40°-50°	247.9	4.4
50°-60°	206.1	3.7
60°-70°	142.3	2.5
70°-80°	71.9	1.3
80°-90°	21.1	0.4
90°-100°	45.4	0.8
100°-110°	298.6	5.3
110°-120°	570.3	10.2
120°-130°	723.9	12.9
130°-140°	774.4	13.8
140°-150°	724.2	12.9
150°-160°	584.0	10.4
160°-170°	376.6	6.7
170°-180°	129.8	2.3
0°-30°	439.8	7.8
0°-40°	696.6	12.4
0°-60°	1150.6	20.5
0°-90°	1385.8	24.7
90°-120°	914.3	16.3
90°-150°	3136.8	55.9
90°-180°	4227.0	75.3
0°-180°	5613.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	598	598	598	598	598	
5°	598	596	590	595	594	57
15°	569	565	554	553	550	160
25°	515	506	488	480	475	237
35°	445	430	407	392	384	278
45°	363	346	318	296	288	280
55°	275	257	227	203	194	246
65°	187	167	138	118	113	185
75°	100	82	61	50	48	105
85°	25	16	14	13	13	27
90°	3	14	22	29	31	4
95°	56	22	22	29	30	69
105°	308	314	319	328	291	322
115°	574	577	576	578	578	565
125°	807	811	809	812	813	721
135°	1001	1000	1004	1006	1008	772
145°	1155	1158	1158	1159	1161	721
155°	1266	1267	1264	1268	1265	584
165°	1335	1330	1330	1338	1329	377
175°	1366	1360	1361	1370	1358	130
180°	1366	1366	1366	1366	1366	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	598.5	598.5	598.5	598.5	598.5
2.5°	600.4	598.5	593.5	598.5	598.1
5°	597.6	595.8	590.3	594.9	594.0
7.5°	593.5	591.7	584.8	588.0	586.6
10°	587.1	584.8	576.5	578.4	576.5
12.5°	578.8	576.1	566.0	566.9	564.2
15°	569.2	565.1	553.6	552.7	549.5
17.5°	558.2	552.3	539.0	536.7	532.1
20°	544.9	539.0	523.4	519.7	513.8
22.5°	530.3	523.4	506.4	500.5	495.9
25°	514.7	506.4	487.6	479.8	475.3
27.5°	498.6	488.6	468.8	459.7	453.3
30°	481.7	470.2	448.7	437.2	429.9
32.5°	463.8	450.5	428.1	414.3	407.4
35°	445.0	430.3	407.4	391.8	383.6
37.5°	425.3	410.2	385.0	368.0	359.8
40°	404.2	389.1	363.0	343.7	335.5
42.5°	384.1	368.0	340.5	320.8	312.1
45°	363.0	346.0	318.5	296.1	287.8
47.5°	341.4	324.0	295.6	272.2	263.1
50°	319.4	301.6	272.2	249.3	240.6
52.5°	297.0	279.6	249.3	225.9	216.8
55°	275.0	256.6	226.9	203.0	194.3
57.5°	253.4	234.2	204.9	180.6	174.2
60°	230.1	211.7	182.4	158.6	151.2
62.5°	209.0	189.7	159.5	137.9	132.4
65°	187.0	167.3	137.9	118.2	112.7
67.5°	164.1	145.3	117.8	100.4	94.0
70°	142.5	123.3	97.2	82.0	77.5
72.5°	119.6	102.7	78.4	66.0	61.9
75°	99.5	82.5	61.0	50.4	47.7
77.5°	78.4	63.7	45.4	38.0	37.1
80°	58.2	44.9	31.2	29.8	29.3
82.5°	40.8	28.9	22.5	21.5	21.1
85°	24.7	15.6	14.2	13.3	13.3
87.5°	10.5	6.9	6.4	6.0	6.4
90°	3.1	14.3	22.5	28.6	30.7
92.5°	15.3	13.3	21.5	27.6	27.6
95°	56.2	21.5	22.5	28.6	29.6
97.5°	107.3	129.8	22.5	27.6	28.6
100°	167.6	186.0	45.0	27.6	28.6
102.5°	235.0	247.3	259.5	29.6	29.6
105°	307.6	313.7	318.8	328.0	291.2
107.5°	374.0	377.0	384.2	389.3	393.4
110°	441.4	444.5	450.6	452.6	455.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	506.8	512.9	515.0	513.9	518.0
115°	574.2	577.3	576.3	578.3	578.3
117.5°	634.5	638.6	641.7	640.6	640.6
120°	695.8	699.9	698.9	700.9	698.9
122.5°	753.0	755.1	757.1	758.1	756.1
125°	807.2	811.3	809.2	812.3	813.3
127.5°	859.3	860.3	865.4	864.4	863.4
130°	909.4	910.4	913.5	914.5	914.5
132.5°	955.3	957.4	961.5	962.5	961.5
135°	1001.3	1000.3	1004.4	1006.4	1008.5
137.5°	1042.2	1042.2	1047.3	1049.3	1048.3
140°	1082.0	1084.1	1086.1	1089.2	1090.2
142.5°	1117.8	1121.9	1122.9	1125.0	1125.0
145°	1154.6	1157.7	1157.7	1158.7	1160.7
147.5°	1183.2	1189.3	1188.3	1189.3	1190.4
150°	1214.9	1219.0	1217.9	1217.9	1219.0
152.5°	1241.4	1244.5	1242.5	1244.5	1243.5
155°	1266.0	1267.0	1263.9	1268.0	1264.9
157.5°	1287.4	1287.4	1283.3	1288.4	1283.3
160°	1305.8	1302.7	1301.7	1307.9	1301.7
162.5°	1322.2	1318.1	1317.1	1323.2	1316.0
165°	1335.4	1330.3	1330.3	1338.5	1329.3
167.5°	1346.7	1341.6	1340.6	1349.7	1339.5
170°	1355.9	1349.7	1350.8	1358.9	1348.7
172.5°	1362.0	1355.9	1356.9	1365.1	1353.8
175°	1366.1	1360.0	1361.0	1370.2	1357.9
177.5°	1369.2	1362.0	1364.1	1372.2	1360.0
180°	1366.1	1366.1	1366.1	1366.1	1366.1

(END OF REPORT)