

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: P1034054

Luminaire Tested: S124RDIW-B350D1340UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034054
REPORT IS A COMBINATION OF REPORTS P1000338 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B350D1340UB40-4F0-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

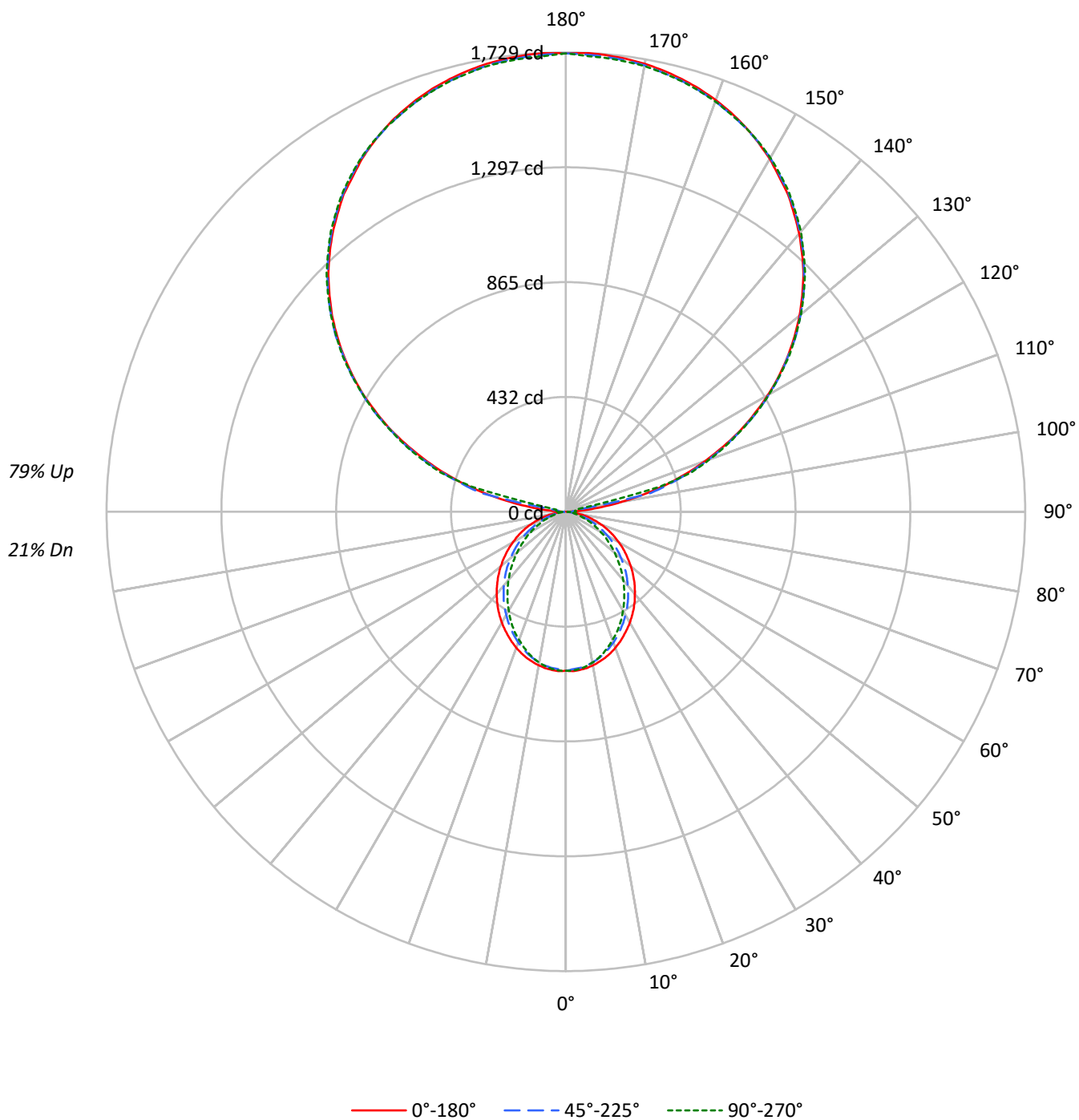
Lumens per Lamp: N/A
Luminaire Lumens: 6725.0 lumens
Efficiency: N/A
Efficacy: 122.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.1
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	100	100	100	100	89	89	89	89	67	67	67	47	47	47	29	29	29
1	91	87	84	80	81	77	74	72	59	57	55	42	40	39	26	25	25
2	83	76	70	66	73	68	63	59	51	48	46	37	35	33	23	22	21
3	76	67	60	55	67	60	54	49	45	42	38	32	30	28	20	19	18
4	69	59	52	46	61	53	46	42	40	36	33	29	26	24	18	17	15
5	64	53	45	39	56	47	40	35	36	31	28	26	23	21	16	15	14
6	58	47	39	34	51	42	35	31	32	28	24	23	20	18	15	13	12
7	54	42	35	29	48	38	31	27	29	25	21	21	18	16	14	12	11
8	50	38	31	26	44	34	28	23	26	22	19	19	16	14	12	11	9
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	11	10	9
10	43	32	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8

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	0.8
10°-20°	156.9	2.3
20°-30°	226.6	3.4
30°-40°	256.8	3.8
40°-50°	247.9	3.7
50°-60°	206.1	3.1
60°-70°	142.3	2.1
70°-80°	71.9	1.1
80°-90°	21.8	0.3
90°-100°	57.3	0.9
100°-110°	377.1	5.6
110°-120°	720.2	10.7
120°-130°	914.2	13.6
130°-140°	978.0	14.5
140°-150°	914.5	13.6
150°-160°	737.5	11.0
160°-170°	475.6	7.1
170°-180°	163.9	2.4
0°-30°	439.8	6.5
0°-40°	696.6	10.4
0°-60°	1150.6	17.1
0°-90°	1386.6	20.6
90°-120°	1154.6	17.2
90°-150°	3961.4	58.9
90°-180°	5338.0	79.4
0°-180°	6725.0	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°	4	18	28	36	39	5
95°	71	27	28	36	37	88
105°	388	396	403	414	368	406
115°	725	729	728	730	730	714
125°	1019	1025	1022	1026	1027	910
135°	1265	1263	1268	1271	1274	974
145°	1458	1462	1462	1463	1466	911
155°	1599	1600	1596	1601	1598	737
165°	1686	1680	1680	1690	1679	477
175°	1725	1718	1719	1730	1715	164
180°	1725	1725	1725	1725	1725	

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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°	3.9	18.1	28.4	36.1	38.7
92.5°	19.4	16.8	27.1	34.8	34.8
95°	71.0	27.1	28.4	36.1	37.4
97.5°	135.5	163.9	28.4	34.8	36.1
100°	211.6	234.8	56.8	34.8	36.1
102.5°	296.8	312.3	327.8	37.4	37.4
105°	388.4	396.1	402.6	414.2	367.8
107.5°	472.3	476.1	485.2	491.6	496.8
110°	557.4	561.3	569.1	571.6	575.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	640.0	647.8	650.3	649.1	654.2
115°	725.2	729.1	727.8	730.3	730.3
117.5°	801.3	806.5	810.3	809.1	809.1
120°	878.7	883.9	882.6	885.2	882.6
122.5°	951.0	953.6	956.2	957.5	954.9
125°	1019.4	1024.6	1022.0	1025.8	1027.1
127.5°	1085.2	1086.5	1092.9	1091.6	1090.4
130°	1148.4	1149.7	1153.6	1154.9	1154.9
132.5°	1206.5	1209.1	1214.2	1215.5	1214.2
135°	1264.6	1263.3	1268.4	1271.0	1273.6
137.5°	1316.2	1316.2	1322.6	1325.2	1323.9
140°	1366.5	1369.1	1371.7	1375.5	1376.8
142.5°	1411.7	1416.8	1418.1	1420.7	1420.7
145°	1458.1	1462.0	1462.0	1463.3	1465.9
147.5°	1494.2	1502.0	1500.7	1502.0	1503.3
150°	1534.2	1539.4	1538.1	1538.1	1539.4
152.5°	1567.8	1571.7	1569.1	1571.7	1570.4
155°	1598.8	1600.1	1596.2	1601.3	1597.5
157.5°	1625.9	1625.9	1620.7	1627.2	1620.7
160°	1649.1	1645.2	1643.9	1651.7	1643.9
162.5°	1669.7	1664.6	1663.3	1671.0	1662.0
165°	1686.5	1680.1	1680.1	1690.4	1678.8
167.5°	1700.7	1694.3	1693.0	1704.6	1691.7
170°	1712.3	1704.6	1705.9	1716.2	1703.3
172.5°	1720.1	1712.3	1713.6	1723.9	1709.7
175°	1725.2	1717.5	1718.8	1730.4	1714.9
177.5°	1729.1	1720.1	1722.6	1733.0	1717.5
180°	1725.2	1725.2	1725.2	1725.2	1725.2

(END OF REPORT)