

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: P1033835

Luminaire Tested: S124RDIW-B1020D1050UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033835
REPORT IS A COMBINATION OF REPORTS P999849 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D1050UB35-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721}
{m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

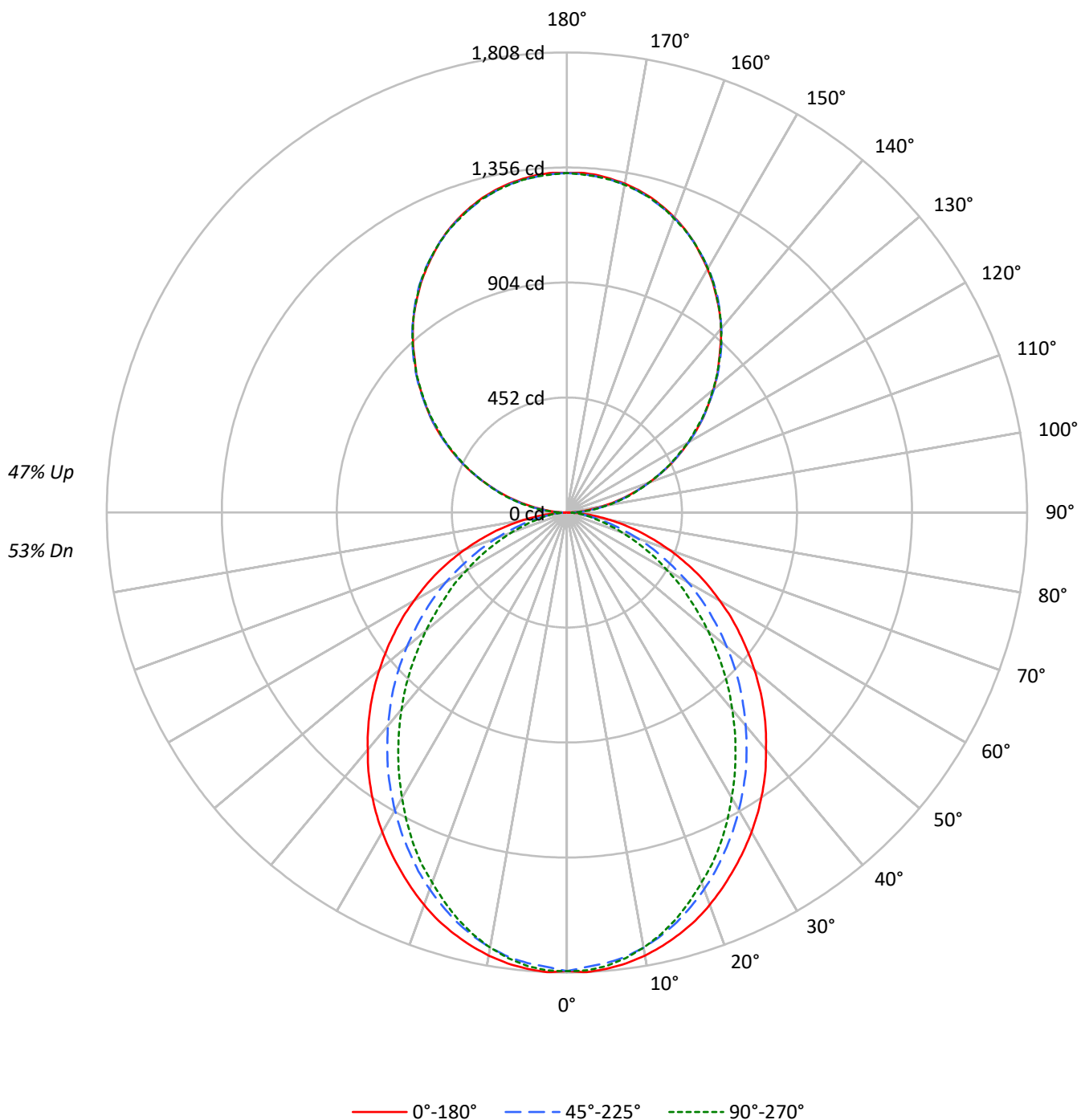
Lumens per Lamp: N/A
Luminaire Lumens: 7870.0 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 78.3
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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59
1	99	95	91	87	91	88	84	81	75	73	70	63	62	60	52	51	50
2	90	83	77	72	83	77	72	67	66	62	59	56	53	51	47	45	43
3	82	73	66	60	76	68	62	57	58	54	50	50	46	43	41	39	37
4	76	65	57	51	70	60	54	48	52	47	43	44	40	37	37	34	32
5	69	58	50	44	64	54	47	42	47	41	37	40	36	32	34	30	28
6	64	52	44	38	59	49	41	36	42	37	32	36	32	28	31	27	25
7	59	47	39	34	55	44	37	32	38	33	29	33	29	25	28	25	22
8	55	43	35	30	51	40	33	28	35	29	25	30	26	23	26	22	20
9	51	39	32	27	48	37	30	25	32	27	23	28	24	20	24	20	18
10	48	36	29	24	45	34	27	23	30	24	21	26	22	19	22	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14699	14699	14699
5°	14700	14262	14264
10°	14576	13812	13648
15°	14375	13252	12922
20°	14113	12613	12093
25°	13785	11923	11284
30°	13464	11220	10375
35°	13112	10508	9487
40°	12692	9740	8574
45°	12298	8979	7671
50°	11851	8148	6753
55°	11367	7296	5807
60°	10831	6391	4872
65°	10312	5353	3970
70°	9575	4261	3035
75°	8631	3101	2122
80°	7210	1904	1525
85°	5421	1097	838

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12298 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.5	2.2
10°-20°	472.6	6.0
20°-30°	682.3	8.7
30°-40°	773.3	9.8
40°-50°	746.6	9.5
50°-60°	620.7	7.9
60°-70°	428.4	5.4
70°-80°	216.5	2.8
80°-90°	57.8	0.7
90°-100°	87.0	1.1
100°-110°	260.5	3.3
110°-120°	442.6	5.6
120°-130°	583.6	7.4
130°-140°	655.5	8.3
140°-150°	644.3	8.2
150°-160°	541.9	6.9
160°-170°	360.6	4.6
170°-180°	126.3	1.6
0°-30°	1324.4	16.8
0°-40°	2097.7	26.7
0°-60°	3465.1	44.0
0°-90°	4167.8	53.0
90°-120°	790.0	10.0
90°-150°	2673.5	34.0
90°-180°	3702.0	47.0
0°-180°	7870.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1803	1803	1803	1803	1803	
5°	1800	1794	1778	1792	1789	171
15°	1714	1702	1667	1664	1655	483
25°	1550	1525	1468	1445	1431	714
35°	1340	1296	1227	1180	1155	838
45°	1093	1042	959	892	867	843
55°	828	773	683	611	585	741
65°	563	504	415	356	340	556
75°	300	248	184	152	144	316
85°	74	47	43	40	40	82
90°	3	14	23	29	31	9
95°	62	71	78	82	82	67
105°	240	242	246	249	252	255
115°	450	450	448	447	446	444
125°	655	655	654	652	650	584
135°	845	851	851	849	846	654
145°	1027	1031	1032	1031	1028	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°	1802.6	1802.6	1802.6	1802.6	1802.6
2.5°	1808.1	1802.6	1787.4	1802.6	1801.2
5°	1799.8	1794.3	1777.7	1791.5	1788.8
7.5°	1787.4	1781.9	1761.2	1770.8	1766.7
10°	1768.1	1761.2	1736.3	1741.8	1736.3
12.5°	1743.2	1734.9	1704.6	1707.3	1699.0
15°	1714.2	1701.8	1667.3	1664.5	1654.9
17.5°	1681.1	1663.2	1623.1	1616.2	1602.4
20°	1641.1	1623.1	1576.2	1565.2	1547.2
22.5°	1596.9	1576.2	1525.1	1507.2	1493.4
25°	1550.0	1525.1	1468.5	1445.1	1431.3
27.5°	1501.7	1471.3	1412.0	1384.4	1365.0
30°	1450.6	1416.1	1351.2	1316.7	1294.6
32.5°	1396.8	1356.7	1289.1	1247.7	1227.0
35°	1340.2	1296.0	1227.0	1180.1	1155.2
37.5°	1280.8	1235.3	1159.4	1108.3	1083.5
40°	1217.3	1171.8	1093.1	1035.2	1010.3
42.5°	1156.6	1108.3	1025.5	966.1	939.9
45°	1093.1	1042.1	959.2	891.6	866.8
47.5°	1028.3	975.8	890.2	819.8	792.2
50°	962.0	908.2	819.8	750.8	724.6
52.5°	894.4	841.9	750.8	680.4	652.8
55°	828.1	772.9	683.2	611.4	585.2
57.5°	763.3	705.3	617.0	543.8	524.5
60°	692.9	637.7	549.3	477.6	455.5
62.5°	629.4	571.4	480.3	415.4	398.9
65°	563.1	503.8	415.4	356.1	339.5
67.5°	494.1	437.5	354.7	302.3	282.9
70°	429.2	371.3	292.6	247.1	233.3
72.5°	360.2	309.2	236.0	198.8	186.3
75°	299.5	248.4	183.6	151.8	143.5
77.5°	236.0	191.8	136.6	114.6	111.8
80°	175.3	135.3	93.9	89.7	88.3
82.5°	122.8	87.0	67.6	64.9	63.5
85°	74.5	46.9	42.8	40.0	40.0
87.5°	31.7	20.7	19.3	17.9	19.3
90°	3.1	14.4	22.7	28.9	31.0
92.5°	26.8	40.2	45.4	48.5	49.5
95°	61.9	71.2	78.4	81.5	81.5
97.5°	99.1	107.3	115.6	119.7	119.7
100°	144.5	148.6	157.9	159.9	159.9
102.5°	191.9	193.0	201.2	204.3	205.4
105°	240.4	241.5	245.6	248.7	251.8
107.5°	291.0	292.0	293.1	297.2	296.2
110°	342.6	344.7	343.6	341.6	344.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	396.3	396.3	394.2	394.2	394.2
115°	449.9	449.9	447.9	446.8	445.8
117.5°	500.5	500.5	499.5	496.4	493.3
120°	551.1	555.2	552.1	546.9	549.0
122.5°	603.7	604.7	603.7	600.6	595.4
125°	655.3	655.3	654.2	652.2	650.1
127.5°	701.7	704.8	702.7	700.7	699.6
130°	751.2	754.3	754.3	752.3	748.1
132.5°	801.8	803.9	802.8	800.8	799.7
135°	845.1	851.3	851.3	849.3	846.2
137.5°	893.7	896.7	898.8	895.7	896.7
140°	942.2	944.2	944.2	943.2	942.2
142.5°	986.5	988.6	987.6	987.6	987.6
145°	1026.8	1030.9	1031.9	1030.9	1027.8
147.5°	1068.0	1073.2	1072.2	1071.1	1070.1
150°	1105.2	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)