

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: P1032877

Luminaire Tested: S124RDIW-B1020D470UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032877
REPORT IS A COMBINATION OF REPORTS P999968 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D470UB2750-4F0-XX-W2A-F_3500K
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

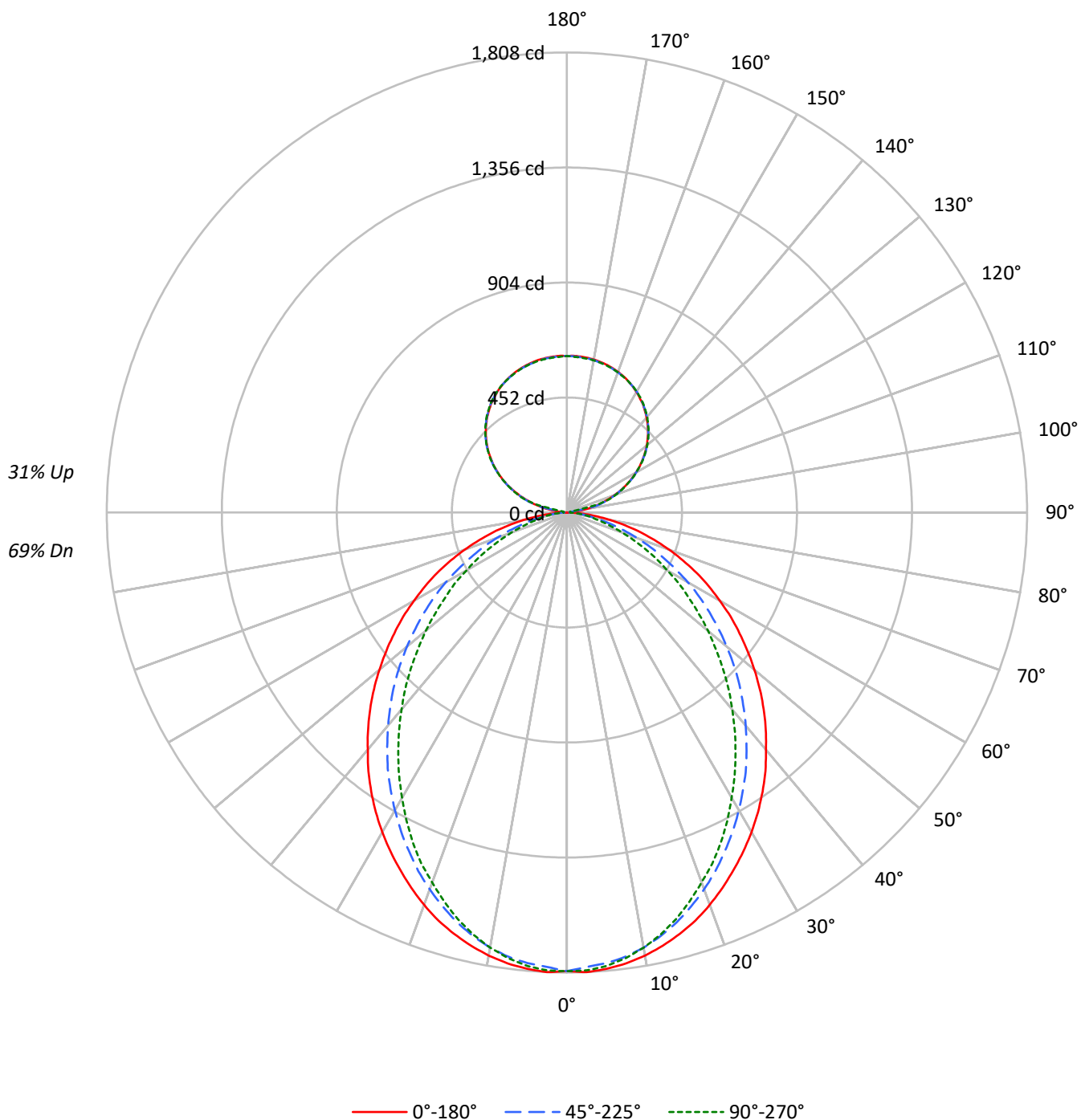
Lumens per Lamp: N/A
Luminaire Lumens: 6070.0 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 60
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			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	112	112	112	112	105	105	105	105	94	94	94	83	83	83	73	73	73	69		
1	102	98	94	91	97	93	89	86	83	80	78	74	72	70	65	64	63	59		
2	94	86	80	75	88	82	76	71	73	69	65	65	62	59	58	56	53	50		
3	86	76	69	63	81	72	66	60	65	60	55	58	54	50	52	49	46	42		
4	79	68	60	53	74	64	57	51	58	52	47	52	47	44	46	43	40	37		
5	72	60	52	46	68	58	50	45	52	46	41	47	42	38	42	38	35	32		
6	67	54	46	40	63	52	44	39	47	41	36	42	37	34	38	34	31	28		
7	62	49	41	36	58	47	40	34	43	37	32	39	34	30	35	31	28	25		
8	58	45	37	32	54	43	36	31	39	33	29	36	31	27	32	28	25	23		
9	54	41	34	29	51	40	32	28	36	30	26	33	28	24	30	26	23	21		
10	50	38	31	26	48	36	30	25	33	28	24	30	26	22	28	24	21	19		

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	2.8
10°-20°	472.6	7.8
20°-30°	682.3	11.2
30°-40°	773.3	12.7
40°-50°	746.6	12.3
50°-60°	620.7	10.2
60°-70°	428.4	7.1
70°-80°	216.5	3.6
80°-90°	56.2	0.9
90°-100°	20.4	0.3
100°-110°	134.5	2.2
110°-120°	256.8	4.2
120°-130°	326.0	5.4
130°-140°	348.8	5.7
140°-150°	326.1	5.4
150°-160°	263.0	4.3
160°-170°	169.6	2.8
170°-180°	58.5	1.0
0°-30°	1324.4	21.8
0°-40°	2097.7	34.6
0°-60°	3465.1	57.1
0°-90°	4166.2	68.6
90°-120°	411.7	6.8
90°-150°	1412.7	23.3
90°-180°	1904.0	31.4
0°-180°	6070.0	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°	1	6	10	13	14	6
95°	25	10	10	13	13	31
105°	138	141	144	148	131	145
115°	259	260	260	260	260	255
125°	364	365	364	366	366	325
135°	451	450	452	453	454	347
145°	520	521	521	522	523	325
155°	570	571	569	571	570	263
165°	601	599	599	603	599	170
175°	615	612	613	617	612	59
180°	615	615	615	615	615	



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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°	1.4	6.4	10.1	12.9	13.8
92.5°	6.9	6.0	9.7	12.4	12.4
95°	25.3	9.7	10.1	12.9	13.3
97.5°	48.3	58.4	10.1	12.4	12.9
100°	75.5	83.7	20.2	12.4	12.9
102.5°	105.8	111.4	116.9	13.3	13.3
105°	138.5	141.3	143.6	147.7	131.1
107.5°	168.4	169.8	173.0	175.3	177.2
110°	198.8	200.2	202.9	203.8	205.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	228.2	231.0	231.9	231.5	233.3
115°	258.6	260.0	259.5	260.4	260.4
117.5°	285.8	287.6	289.0	288.5	288.5
120°	313.4	315.2	314.7	315.7	314.7
122.5°	339.1	340.1	341.0	341.4	340.5
125°	363.5	365.4	364.4	365.8	366.3
127.5°	387.0	387.5	389.8	389.3	388.8
130°	409.5	410.0	411.4	411.8	411.8
132.5°	430.2	431.2	433.0	433.5	433.0
135°	451.0	450.5	452.3	453.3	454.2
137.5°	469.4	469.4	471.7	472.6	472.1
140°	487.3	488.2	489.1	490.5	491.0
142.5°	503.4	505.3	505.7	506.6	506.6
145°	520.0	521.4	521.4	521.8	522.7
147.5°	532.9	535.6	535.2	535.6	536.1
150°	547.1	549.0	548.5	548.5	549.0
152.5°	559.1	560.5	559.5	560.5	560.0
155°	570.1	570.6	569.2	571.1	569.7
157.5°	579.8	579.8	578.0	580.3	578.0
160°	588.1	586.7	586.2	589.0	586.2
162.5°	595.4	593.6	593.1	595.9	592.7
165°	601.4	599.1	599.1	602.8	598.7
167.5°	606.5	604.2	603.7	607.9	603.3
170°	610.6	607.9	608.3	612.0	607.4
172.5°	613.4	610.6	611.1	614.8	609.7
175°	615.2	612.5	612.9	617.1	611.5
177.5°	616.6	613.4	614.3	618.0	612.5
180°	615.2	615.2	615.2	615.2	615.2

(END OF REPORT)