

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: P1033893

Luminaire Tested: S124RDIW-B1020D470UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033893
REPORT IS A COMBINATION OF REPORTS P999981 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D470UB35-4F0-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

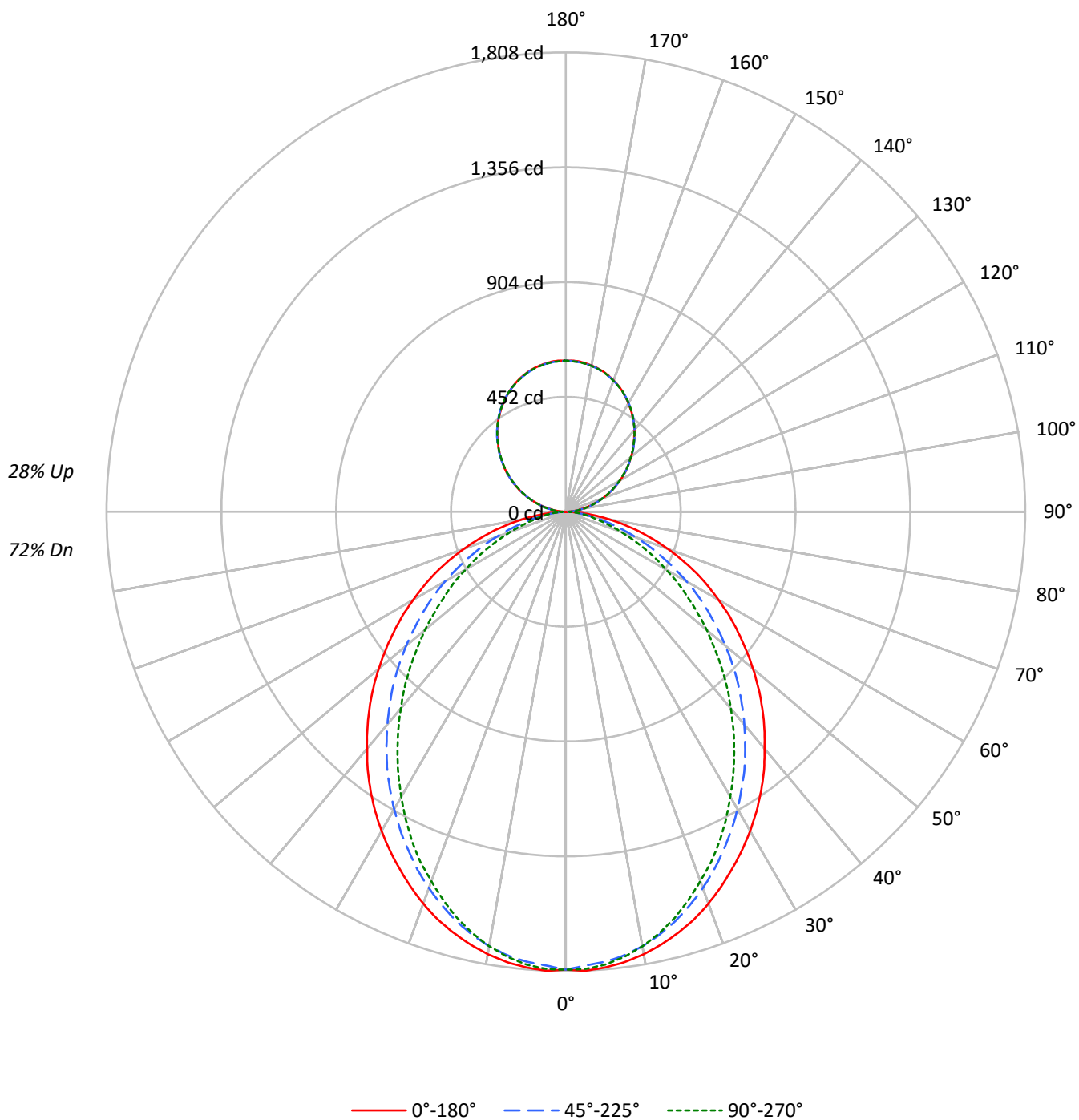
Lumens per Lamp: N/A
Luminaire Lumens: 5817.0 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76
1	103	99	95	91	98	94	90	87	84	82	79	76	74	72	68	66	65
2	94	87	81	75	89	82	77	72	74	70	66	67	64	61	60	58	55
3	86	77	69	63	81	73	66	61	66	61	56	60	55	52	54	50	48
4	79	68	60	54	75	65	58	52	59	53	48	53	49	45	48	44	41
5	73	61	53	47	69	58	51	45	53	47	42	48	43	39	44	39	36
6	67	55	47	41	64	53	45	39	48	42	37	44	38	34	40	35	32
7	62	50	42	36	59	48	40	35	44	37	33	40	35	31	36	32	29
8	58	45	38	32	55	44	36	31	40	34	29	37	31	28	33	29	26
9	54	42	34	29	51	40	33	28	37	31	27	34	29	25	31	27	23
10	51	38	31	26	48	37	30	25	34	28	24	31	26	23	29	24	21

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	2.9
10°-20°	472.6	8.1
20°-30°	682.3	11.7
30°-40°	773.3	13.3
40°-50°	746.6	12.8
50°-60°	620.7	10.7
60°-70°	428.4	7.4
70°-80°	216.5	3.7
80°-90°	56.2	1.0
90°-100°	38.8	0.7
100°-110°	116.2	2.0
110°-120°	197.3	3.4
120°-130°	260.2	4.5
130°-140°	292.3	5.0
140°-150°	287.3	4.9
150°-160°	241.6	4.2
160°-170°	160.8	2.8
170°-180°	56.3	1.0
0°-30°	1324.4	22.8
0°-40°	2097.7	36.1
0°-60°	3465.1	59.6
0°-90°	4166.2	71.6
90°-120°	352.3	6.1
90°-150°	1192.1	20.5
90°-180°	1651.0	28.4
0°-180°	5817.0	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°	28	32	35	36	36	30
105°	107	108	110	111	112	114
115°	201	201	200	199	199	198
125°	292	292	292	291	290	260
135°	377	380	380	379	377	292
145°	458	460	460	460	458	287
155°	524	524	524	526	524	241
165°	571	570	569	572	570	161
175°	594	592	591	594	591	56
180°	595	595	595	595	595	

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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°	12.0	17.9	20.2	21.6	22.1
95°	27.6	31.7	35.0	36.3	36.3
97.5°	44.2	47.9	51.5	53.4	53.4
100°	64.4	66.3	70.4	71.3	71.3
102.5°	85.6	86.0	89.7	91.1	91.6
105°	107.2	107.7	109.5	110.9	112.3
107.5°	129.8	130.2	130.7	132.5	132.1
110°	152.8	153.7	153.2	152.3	153.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	176.7	176.7	175.8	175.8	175.8
115°	200.6	200.6	199.7	199.2	198.8
117.5°	223.2	223.2	222.7	221.3	219.9
120°	245.7	247.5	246.2	243.9	244.8
122.5°	269.2	269.6	269.2	267.8	265.5
125°	292.2	292.2	291.7	290.8	289.9
127.5°	312.9	314.3	313.3	312.4	312.0
130°	335.0	336.3	336.3	335.4	333.6
132.5°	357.5	358.4	358.0	357.1	356.6
135°	376.8	379.6	379.6	378.7	377.3
137.5°	398.5	399.8	400.8	399.4	399.8
140°	420.1	421.0	421.0	420.6	420.1
142.5°	439.9	440.8	440.3	440.3	440.3
145°	457.8	459.7	460.1	459.7	458.3
147.5°	476.2	478.5	478.1	477.6	477.1
150°	492.8	494.6	494.6	494.6	494.2
152.5°	508.4	509.4	509.8	511.2	509.8
155°	524.5	524.5	524.1	525.9	524.1
157.5°	538.3	537.4	537.4	538.8	537.4
160°	550.3	549.8	549.4	550.8	548.5
162.5°	561.3	560.0	559.5	562.3	560.0
165°	571.0	569.6	568.7	571.5	569.6
167.5°	578.8	577.0	577.0	579.8	577.0
170°	585.3	583.0	583.4	586.2	583.0
172.5°	589.9	588.0	588.0	591.3	588.0
175°	594.0	591.7	591.3	594.5	591.3
177.5°	595.9	593.6	593.6	596.8	593.1
180°	594.9	594.9	594.9	594.9	594.9

(END OF REPORT)