

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: P1033885

Luminaire Tested: S124RDIW-B1020D470UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033885
REPORT IS A COMBINATION OF REPORTS P999955 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D470UB27-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

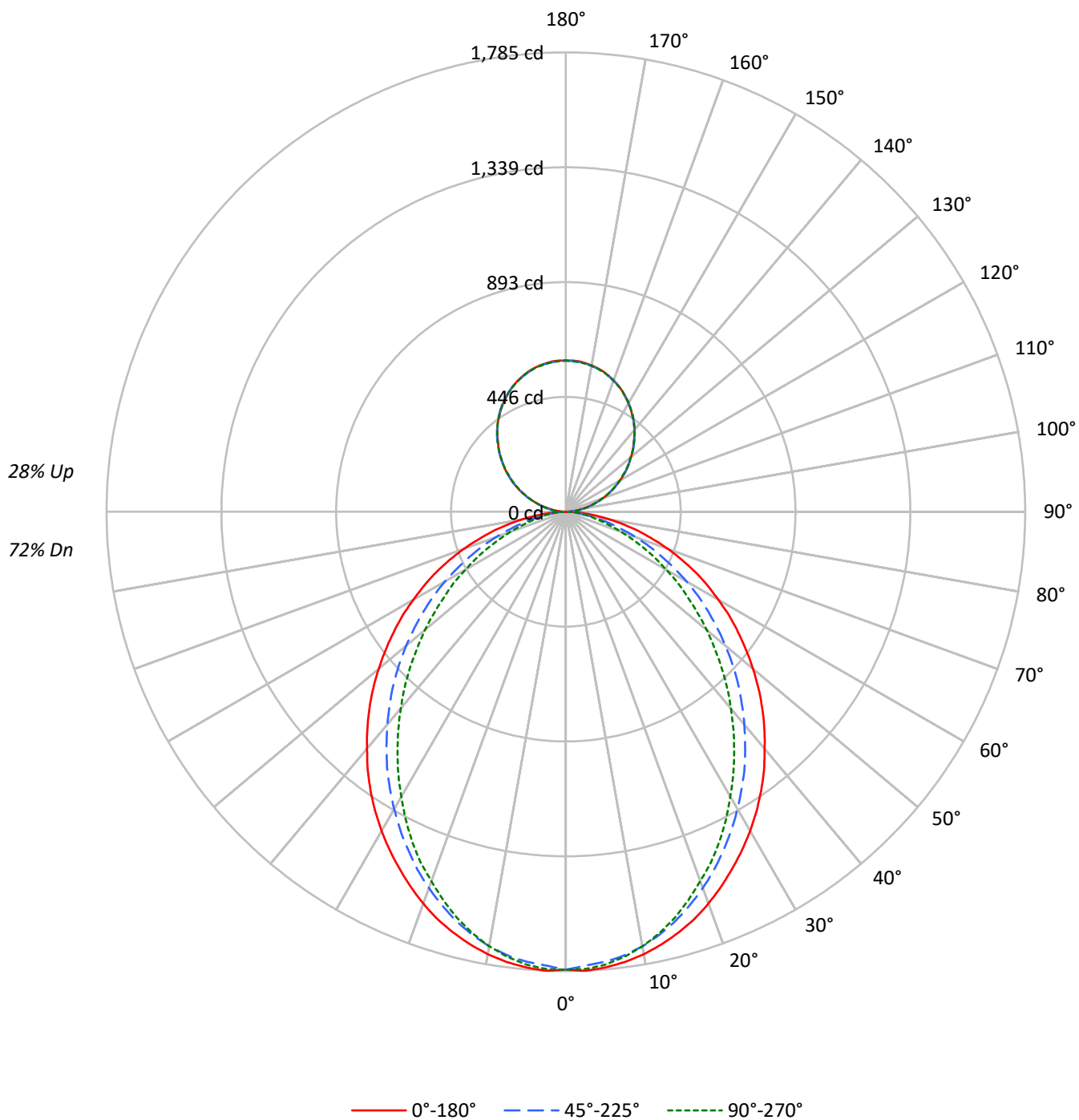
Lumens per Lamp: N/A
Luminaire Lumens: 5743.0 lumens
Efficiency: N/A
Efficacy: 95.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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°	14512	14512	14512
5°	14513	14081	14082
10°	14391	13636	13474
15°	14192	13083	12757
20°	13933	12452	11939
25°	13610	11772	11140
30°	13293	11077	10243
35°	12945	10374	9366
40°	12531	9616	8466
45°	12142	8865	7573
50°	11701	8044	6668
55°	11223	7203	5733
60°	10692	6309	4810
65°	10182	5286	3920
70°	9455	4207	2996
75°	8521	3060	2095
80°	7119	1880	1506
85°	5356	1081	828

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12142 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.3	2.9
10°-20°	466.6	8.1
20°-30°	673.6	11.7
30°-40°	763.5	13.3
40°-50°	737.1	12.8
50°-60°	612.8	10.7
60°-70°	423.0	7.4
70°-80°	213.7	3.7
80°-90°	55.5	1.0
90°-100°	38.3	0.7
100°-110°	114.7	2.0
110°-120°	194.8	3.4
120°-130°	256.9	4.5
130°-140°	288.6	5.0
140°-150°	283.6	4.9
150°-160°	238.5	4.2
160°-170°	158.7	2.8
170°-180°	55.6	1.0
0°-30°	1307.6	22.8
0°-40°	2071.0	36.1
0°-60°	3421.0	59.6
0°-90°	4113.3	71.6
90°-120°	347.8	6.1
90°-150°	1176.9	20.5
90°-180°	1630.0	28.4
0°-180°	5743.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1780	1780	1780	1780	1780	
5°	1777	1771	1755	1769	1766	169
15°	1692	1680	1646	1643	1634	477
25°	1530	1506	1450	1427	1413	705
35°	1323	1280	1211	1165	1140	827
45°	1079	1029	947	880	856	832
55°	818	763	674	604	578	731
65°	556	497	410	352	335	549
75°	296	245	181	150	142	312
85°	74	46	42	40	40	81
90°	1	6	10	13	14	6
95°	27	31	34	36	36	30
105°	106	106	108	110	111	112
115°	198	198	197	197	196	195
125°	288	288	288	287	286	257
135°	372	375	375	374	372	288
145°	452	454	454	454	452	283
155°	518	518	517	519	517	238
165°	564	562	562	564	562	159
175°	586	584	584	587	584	56
180°	587	587	587	587	587	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1779.6	1779.6	1779.6	1779.6	1779.6
2.5°	1785.1	1779.6	1764.6	1779.6	1778.3
5°	1776.9	1771.4	1755.1	1768.7	1766.0
7.5°	1764.6	1759.2	1738.7	1748.3	1744.2
10°	1745.6	1738.7	1714.2	1719.7	1714.2
12.5°	1721.0	1712.8	1682.9	1685.6	1677.4
15°	1692.4	1680.1	1646.1	1643.4	1633.8
17.5°	1659.7	1642.0	1602.5	1595.7	1582.0
20°	1620.2	1602.5	1556.1	1545.2	1527.5
22.5°	1576.6	1556.1	1505.7	1488.0	1474.4
25°	1530.3	1505.7	1449.9	1426.7	1413.1
27.5°	1482.6	1452.6	1394.0	1366.7	1347.7
30°	1432.1	1398.1	1334.0	1300.0	1278.2
32.5°	1379.0	1339.5	1272.7	1231.8	1211.4
35°	1323.1	1279.5	1211.4	1165.1	1140.5
37.5°	1264.5	1219.6	1144.6	1094.2	1069.7
40°	1201.9	1156.9	1079.2	1022.0	997.5
42.5°	1141.9	1094.2	1012.4	953.9	928.0
45°	1079.2	1028.8	947.0	880.3	855.7
47.5°	1015.2	963.4	878.9	809.4	782.2
50°	949.8	896.6	809.4	741.3	715.4
52.5°	883.0	831.2	741.3	671.8	644.5
55°	817.6	763.1	674.5	603.7	577.8
57.5°	753.5	696.3	609.1	536.9	517.8
60°	684.0	629.5	542.3	471.5	449.7
62.5°	621.4	564.1	474.2	410.2	393.8
65°	556.0	497.4	410.2	351.6	335.2
67.5°	487.8	432.0	350.2	298.4	279.3
70°	423.8	366.6	288.9	243.9	230.3
72.5°	355.7	305.2	233.0	196.2	184.0
75°	295.7	245.3	181.2	149.9	141.7
77.5°	233.0	189.4	134.9	113.1	110.4
80°	173.1	133.5	92.7	88.6	87.2
82.5°	121.3	85.8	66.8	64.0	62.7
85°	73.6	46.3	42.2	39.5	39.5
87.5°	31.3	20.4	19.1	17.7	19.1
90°	1.4	6.4	10.0	12.7	13.6
92.5°	11.8	17.7	20.0	21.4	21.8
95°	27.3	31.3	34.5	35.9	35.9
97.5°	43.6	47.2	50.9	52.7	52.7
100°	63.6	65.4	69.5	70.4	70.4
102.5°	84.5	84.9	88.6	89.9	90.4
105°	105.8	106.3	108.1	109.5	110.8
107.5°	128.1	128.6	129.0	130.8	130.4
110°	150.8	151.7	151.3	150.4	151.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174.4	174.4	173.5	173.5	173.5
115°	198.1	198.1	197.2	196.7	196.2
117.5°	220.3	220.3	219.9	218.5	217.1
120°	242.6	244.4	243.0	240.8	241.7
122.5°	265.7	266.2	265.7	264.4	262.1
125°	288.5	288.5	288.0	287.1	286.2
127.5°	308.9	310.3	309.4	308.5	308.0
130°	330.7	332.1	332.1	331.2	329.3
132.5°	353.0	353.9	353.4	352.5	352.1
135°	372.0	374.8	374.8	373.9	372.5
137.5°	393.4	394.8	395.7	394.3	394.8
140°	414.7	415.7	415.7	415.2	414.7
142.5°	434.3	435.2	434.7	434.7	434.7
145°	452.0	453.8	454.3	453.8	452.5
147.5°	470.2	472.4	472.0	471.5	471.1
150°	486.5	488.3	488.3	488.3	487.9
152.5°	502.0	502.9	503.3	504.7	503.3
155°	517.9	517.9	517.4	519.2	517.4
157.5°	531.5	530.6	530.6	532.0	530.6
160°	543.3	542.9	542.4	543.8	541.5
162.5°	554.2	552.8	552.4	555.1	552.8
165°	563.8	562.4	561.5	564.2	562.4
167.5°	571.5	569.7	569.7	572.4	569.7
170°	577.8	575.6	576.0	578.7	575.6
172.5°	582.4	580.6	580.6	583.7	580.6
175°	586.5	584.2	583.7	586.9	583.7
177.5°	588.3	586.0	586.0	589.2	585.6
180°	587.4	587.4	587.4	587.4	587.4

(END OF REPORT)