

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: P1032878

Luminaire Tested: S124RDIW-B1020D470UB2750-4F0-XX-W2A-F_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032878
REPORT IS A COMBINATION OF REPORTS P999970 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_5000K
Description: Define 4 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

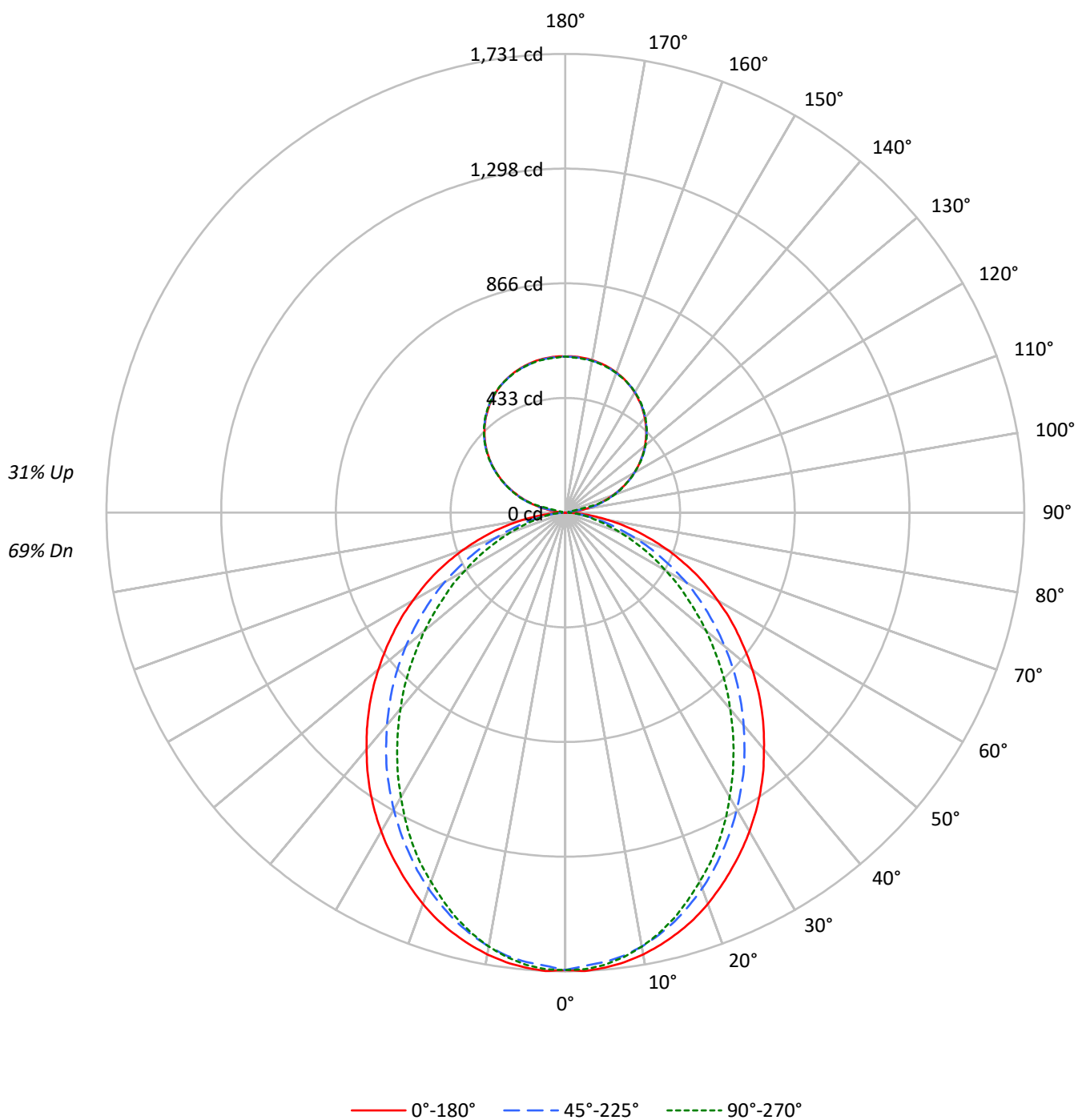
Lumens per Lamp: N/A
Luminaire Lumens: 5812.0 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

TEST NUMBER: P1032878

CATALOG NUMBER: S124RDIW-B1020D470UB2750-4F0-XX-W2A-F_5000K

Luminous Intensity Polar Plot



TEST NUMBER: P1032878

CATALOG NUMBER: S124RDIW-B1020D470UB2750-4F0-XX-W2A-F_5000K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14075	14075	14075
5°	14076	13656	13657
10°	13956	13225	13068
15°	13765	12688	12372
20°	13513	12077	11579
25°	13199	11417	10804
30°	12893	10744	9934
35°	12554	10062	9084
40°	12153	9327	8210
45°	11776	8598	7345
50°	11347	7802	6466
55°	10884	6986	5560
60°	10370	6120	4664
65°	9875	5126	3802
70°	9169	4080	2905
75°	8265	2969	2032
80°	6901	1823	1461
85°	5196	1051	803

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11776 cd/sqm

TEST NUMBER: P1032878

CATALOG NUMBER: S124RDIW-B1020D470UB2750-4F0-XX-W2A-F_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.3	2.8
10°-20°	452.5	7.8
20°-30°	653.3	11.2
30°-40°	740.4	12.7
40°-50°	714.9	12.3
50°-60°	594.3	10.2
60°-70°	410.2	7.1
70°-80°	207.3	3.6
80°-90°	53.9	0.9
90°-100°	19.6	0.3
100°-110°	128.8	2.2
110°-120°	245.9	4.2
120°-130°	312.2	5.4
130°-140°	333.9	5.7
140°-150°	312.3	5.4
150°-160°	251.8	4.3
160°-170°	162.4	2.8
170°-180°	56.0	1.0
0°-30°	1268.1	21.8
0°-40°	2008.6	34.6
0°-60°	3317.8	57.1
0°-90°	3989.2	68.6
90°-120°	394.2	6.8
90°-150°	1352.6	23.3
90°-180°	1823.0	31.4
0°-180°	5812.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1726	1726	1726	1726	1726	
5°	1723	1718	1702	1715	1713	164
15°	1641	1630	1596	1594	1584	463
25°	1484	1460	1406	1384	1370	684
35°	1283	1241	1175	1130	1106	802
45°	1047	998	918	854	830	807
55°	793	740	654	585	560	709
65°	539	482	398	341	325	532
75°	287	238	176	145	137	302
85°	71	45	41	38	38	78
90°	1	6	10	12	13	5
95°	24	9	10	12	13	30
105°	133	135	138	141	126	139
115°	248	249	248	249	249	244
125°	348	350	349	350	351	311
135°	432	431	433	434	435	333
145°	498	499	499	500	500	311
155°	546	546	545	547	545	252
165°	576	574	574	577	573	163
175°	589	586	587	591	586	56
180°	589	589	589	589	589	

TEST NUMBER: P1032878

CATALOG NUMBER: S124RDIW-B1020D470UB2750-4F0-XX-W2A-F_5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1726.0	1726.0	1726.0	1726.0	1726.0
2.5°	1731.2	1726.0	1711.4	1726.0	1724.6
5°	1723.3	1718.0	1702.2	1715.4	1712.7
7.5°	1711.4	1706.1	1686.3	1695.6	1691.6
10°	1692.9	1686.3	1662.5	1667.8	1662.5
12.5°	1669.1	1661.2	1632.1	1634.8	1626.8
15°	1641.4	1629.5	1596.4	1593.8	1584.5
17.5°	1609.7	1592.5	1554.2	1547.5	1534.3
20°	1571.3	1554.2	1509.2	1498.6	1481.5
22.5°	1529.0	1509.2	1460.3	1443.1	1429.9
25°	1484.1	1460.3	1406.1	1383.7	1370.5
27.5°	1437.9	1408.8	1352.0	1325.5	1307.0
30°	1389.0	1355.9	1293.8	1260.8	1239.6
32.5°	1337.4	1299.1	1234.3	1194.7	1174.9
35°	1283.2	1240.9	1174.9	1129.9	1106.1
37.5°	1226.4	1182.8	1110.1	1061.2	1037.4
40°	1165.6	1122.0	1046.7	991.2	967.4
42.5°	1107.5	1061.2	981.9	925.1	900.0
45°	1046.7	997.8	918.5	853.7	829.9
47.5°	984.6	934.3	852.4	785.0	758.6
50°	921.1	869.6	785.0	718.9	693.8
52.5°	856.4	806.2	718.9	651.5	625.1
55°	792.9	740.1	654.2	585.4	560.3
57.5°	730.8	675.3	590.7	520.7	502.2
60°	663.4	610.6	526.0	457.3	436.1
62.5°	602.6	547.1	459.9	397.8	381.9
65°	539.2	482.4	397.8	341.0	325.1
67.5°	473.1	418.9	339.6	289.4	270.9
70°	411.0	355.5	280.2	236.6	223.3
72.5°	344.9	296.0	226.0	190.3	178.4
75°	286.8	237.9	175.8	145.4	137.4
77.5°	226.0	183.7	130.8	109.7	107.0
80°	167.8	129.5	89.9	85.9	84.6
82.5°	117.6	83.3	64.8	62.1	60.8
85°	71.4	44.9	41.0	38.3	38.3
87.5°	30.4	19.8	18.5	17.2	18.5
90°	1.3	6.2	9.7	12.3	13.2
92.5°	6.6	5.7	9.3	11.9	11.9
95°	24.2	9.3	9.7	12.3	12.8
97.5°	46.3	56.0	9.7	11.9	12.3
100°	72.3	80.2	19.4	11.9	12.3
102.5°	101.3	106.6	111.9	12.8	12.8
105°	132.6	135.3	137.5	141.4	125.6
107.5°	161.3	162.6	165.7	167.9	169.6
110°	190.3	191.7	194.3	195.2	196.5



TEST NUMBER: P1032878

CATALOG NUMBER: S124RDIW-B1020D470UB2750-4F0-XX-W2A-F_5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	218.5	221.2	222.1	221.6	223.4
115°	247.6	248.9	248.5	249.4	249.4
117.5°	273.6	275.4	276.7	276.2	276.2
120°	300.0	301.8	301.4	302.2	301.4
122.5°	324.7	325.6	326.5	326.9	326.0
125°	348.1	349.8	348.9	350.3	350.7
127.5°	370.5	371.0	373.2	372.7	372.3
130°	392.1	392.6	393.9	394.3	394.3
132.5°	412.0	412.8	414.6	415.0	414.6
135°	431.8	431.3	433.1	434.0	434.9
137.5°	449.4	449.4	451.6	452.5	452.0
140°	466.6	467.5	468.3	469.7	470.1
142.5°	482.0	483.8	484.2	485.1	485.1
145°	497.9	499.2	499.2	499.6	500.5
147.5°	510.2	512.8	512.4	512.8	513.3
150°	523.9	525.6	525.2	525.2	525.6
152.5°	535.3	536.6	535.8	536.6	536.2
155°	545.9	546.3	545.0	546.8	545.4
157.5°	555.1	555.1	553.4	555.6	553.4
160°	563.1	561.8	561.3	564.0	561.3
162.5°	570.1	568.4	567.9	570.6	567.5
165°	575.9	573.6	573.6	577.2	573.2
167.5°	580.7	578.5	578.1	582.0	577.6
170°	584.7	582.0	582.5	586.0	581.6
172.5°	587.3	584.7	585.1	588.6	583.8
175°	589.1	586.4	586.9	590.8	585.5
177.5°	590.4	587.3	588.2	591.7	586.4
180°	589.1	589.1	589.1	589.1	589.1

(END OF REPORT)