

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: P1033904

Luminaire Tested: S124RDIW-B1020D770UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033904
REPORT IS A COMBINATION OF REPORTS P999998 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D770UB27-4F0-XX-W2A-F
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

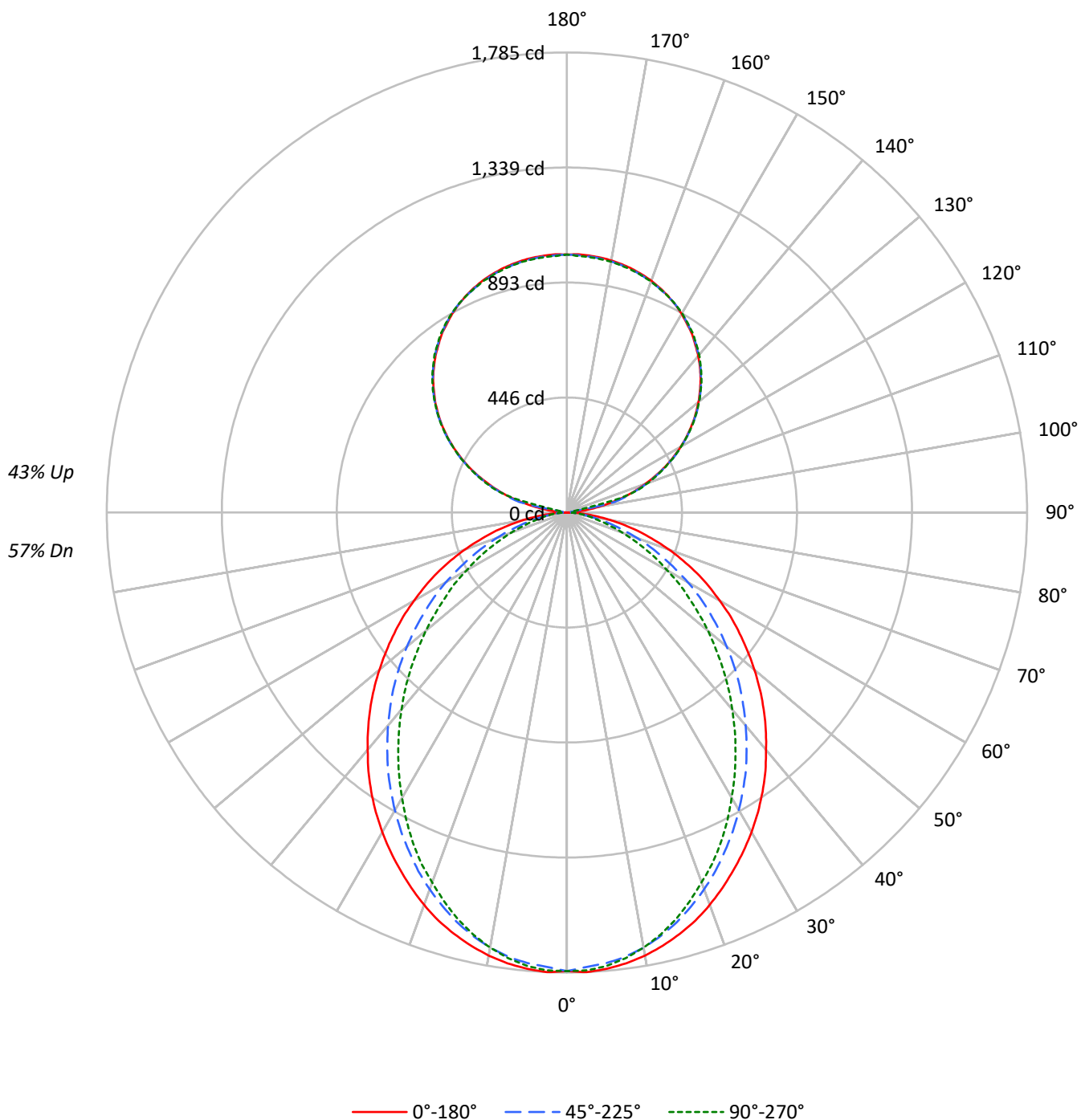
Lumens per Lamp: N/A
Luminaire Lumens: 7211.0 lumens
Efficiency: N/A
Efficacy: 103.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 70
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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	63	63	63
1	100	95	92	88	93	89	86	83	77	75	72	66	64	63	56	55	54
2	91	84	78	73	85	78	73	68	68	64	60	58	55	53	50	47	46
3	83	74	67	61	77	69	63	58	60	55	51	52	48	45	44	41	39
4	76	66	58	52	71	61	54	49	54	48	44	46	42	39	40	36	34
5	70	59	50	45	65	55	48	42	48	42	38	42	37	34	36	32	30
6	65	53	45	39	60	50	42	37	43	38	33	38	33	30	33	29	26
7	60	48	40	34	56	45	38	33	40	34	30	35	30	26	30	26	23
8	56	43	36	30	52	41	34	29	36	30	26	32	27	24	27	24	21
9	52	40	32	27	48	37	31	26	33	28	24	29	25	21	25	22	19
10	49	37	29	24	45	34	28	23	31	25	21	27	23	19	24	20	17

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	2.3
10°-20°	466.6	6.5
20°-30°	673.6	9.3
30°-40°	763.5	10.6
40°-50°	737.1	10.2
50°-60°	612.8	8.5
60°-70°	423.0	5.9
70°-80°	213.7	3.0
80°-90°	56.3	0.8
90°-100°	33.2	0.5
100°-110°	218.8	3.0
110°-120°	417.8	5.8
120°-130°	530.4	7.4
130°-140°	567.4	7.9
140°-150°	530.5	7.4
150°-160°	427.8	5.9
160°-170°	275.9	3.8
170°-180°	95.1	1.3
0°-30°	1307.6	18.1
0°-40°	2071.0	28.7
0°-60°	3421.0	47.4
0°-90°	4114.1	57.1
90°-120°	669.8	9.3
90°-150°	2298.1	31.9
90°-180°	3097.0	42.9
0°-180°	7211.0	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°	2	10	16	21	22	6
95°	41	16	16	21	22	51
105°	225	230	234	240	213	236
115°	421	423	422	424	424	414
125°	591	594	593	595	596	528
135°	734	733	736	737	739	565
145°	846	848	848	849	850	529
155°	928	928	926	929	927	428
165°	978	975	975	981	974	276
175°	1001	996	997	1004	995	95
180°	1001	1001	1001	1001	1001	

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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°	2.2	10.5	16.5	21.0	22.5
92.5°	11.2	9.7	15.7	20.2	20.2
95°	41.2	15.7	16.5	21.0	21.7
97.5°	78.6	95.1	16.5	20.2	21.0
100°	122.8	136.2	32.9	20.2	21.0
102.5°	172.2	181.2	190.1	21.7	21.7
105°	225.3	229.8	233.6	240.3	213.3
107.5°	274.0	276.2	281.5	285.2	288.2
110°	323.4	325.6	330.1	331.6	333.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	371.3	375.8	377.3	376.5	379.5
115°	420.7	422.9	422.2	423.7	423.7
117.5°	464.9	467.9	470.1	469.4	469.4
120°	509.8	512.8	512.0	513.5	512.0
122.5°	551.7	553.2	554.7	555.4	553.9
125°	591.4	594.4	592.9	595.1	595.9
127.5°	629.5	630.3	634.0	633.3	632.5
130°	666.2	667.0	669.2	670.0	670.0
132.5°	699.9	701.4	704.4	705.2	704.4
135°	733.6	732.8	735.8	737.3	738.8
137.5°	763.5	763.5	767.3	768.8	768.0
140°	792.7	794.2	795.7	798.0	798.7
142.5°	818.9	821.9	822.7	824.2	824.2
145°	845.9	848.1	848.1	848.9	850.4
147.5°	866.8	871.3	870.6	871.3	872.1
150°	890.0	893.0	892.3	892.3	893.0
152.5°	909.5	911.8	910.3	911.8	911.0
155°	927.5	928.2	926.0	929.0	926.7
157.5°	943.2	943.2	940.2	943.9	940.2
160°	956.7	954.4	953.7	958.2	953.7
162.5°	968.6	965.7	964.9	969.4	964.2
165°	978.4	974.6	974.6	980.6	973.9
167.5°	986.6	982.9	982.1	988.9	981.4
170°	993.3	988.9	989.6	995.6	988.1
172.5°	997.8	993.3	994.1	1000.1	991.9
175°	1000.8	996.3	997.1	1003.8	994.8
177.5°	1003.1	997.8	999.3	1005.3	996.3
180°	1000.8	1000.8	1000.8	1000.8	1000.8

(END OF REPORT)