

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: P1033757

Luminaire Tested: S124DIW-B795D1560UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033757
REPORT IS A COMBINATION OF REPORTS P998126 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D1560UB40-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

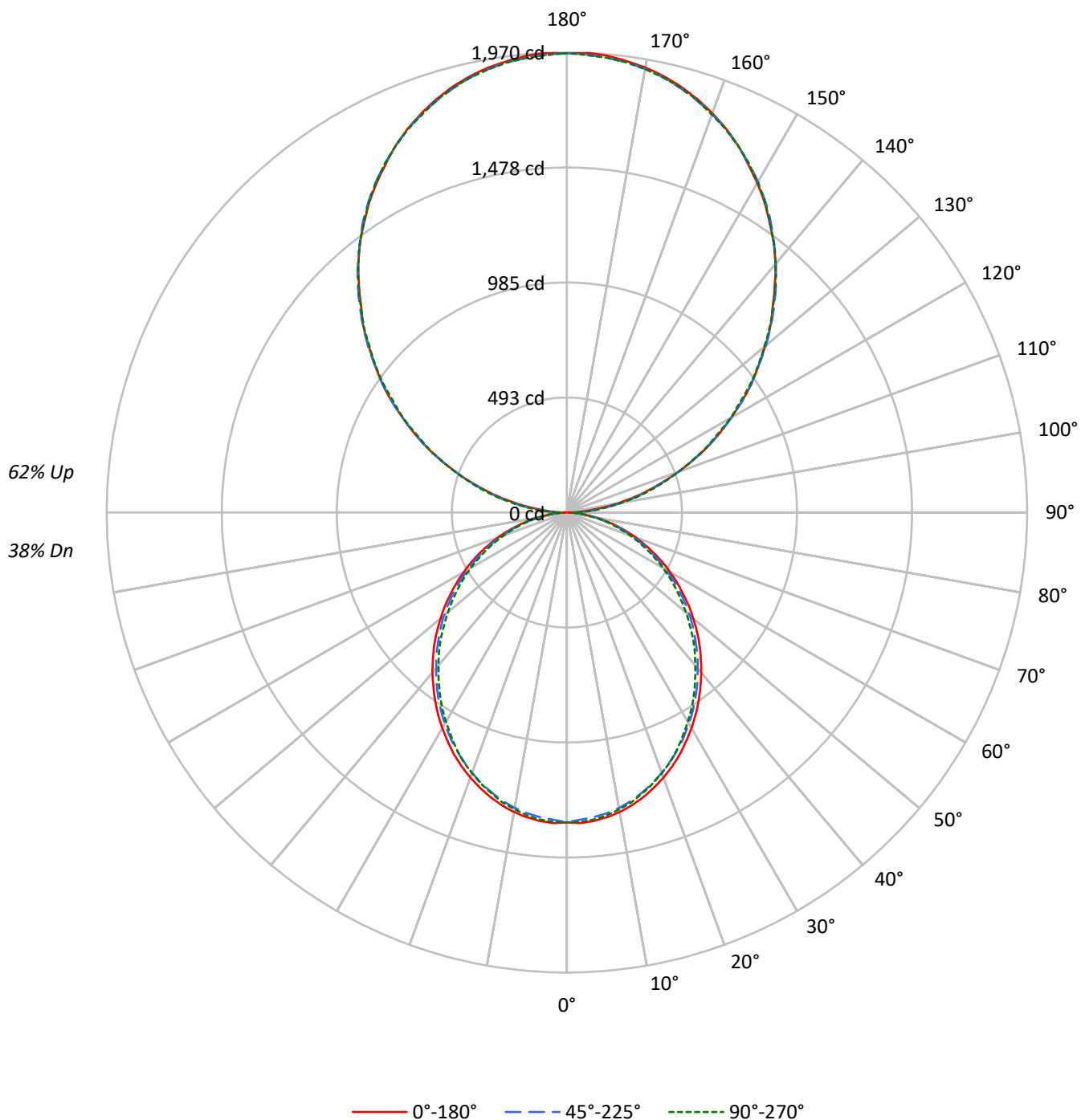
Lumens per Lamp: N/A
Luminaire Lumens: 8868.0 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 88.1
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	38		
1	95	91	87	84	86	83	79	77	67	65	63	53	52	50	40	39	38	32		
2	87	79	73	68	78	72	67	63	59	55	52	47	44	42	35	34	32	27		
3	79	70	63	57	71	64	57	52	52	47	44	41	38	35	31	29	27	23		
4	72	62	54	48	65	56	50	44	46	41	37	37	33	30	28	26	24	20		
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	23	21	17		
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15		
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16	13		
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	16	14	12		
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13	11		
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	16	14	12	10		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10821	10821	10821
5°	10830	10510	10523
10°	10738	10218	10146
15°	10584	9871	9722
20°	10387	9495	9283
25°	10166	9099	8810
30°	9899	8671	8291
35°	9623	8232	7789
40°	9335	7759	7255
45°	9032	7286	6756
50°	8697	6827	6204
55°	8334	6291	5655
60°	7961	5703	5084
65°	7536	5096	4439
70°	7045	4367	3750
75°	6311	3519	3003
80°	5380	2545	2113
85°	4177	1417	1136

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9032 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.1	1.4
10°-20°	352.4	4.0
20°-30°	518.6	5.8
30°-40°	602.8	6.8
40°-50°	602.8	6.8
50°-60°	527.2	5.9
60°-70°	391.4	4.4
70°-80°	222.1	2.5
80°-90°	67.8	0.8
90°-100°	128.2	1.4
100°-110°	384.0	4.3
110°-120°	652.4	7.4
120°-130°	860.4	9.7
130°-140°	966.4	10.9
140°-150°	949.8	10.7
150°-160°	798.9	9.0
160°-170°	531.5	6.0
170°-180°	186.1	2.1
0°-30°	996.1	11.2
0°-40°	1598.9	18.0
0°-60°	2728.9	30.8
0°-90°	3410.2	38.5
90°-120°	1164.7	13.1
90°-150°	3941.3	44.4
90°-180°	5458.0	61.5
0°-180°	8868.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1327	1327	1327	1327	1327	
5°	1326	1322	1310	1322	1320	126
15°	1262	1258	1242	1248	1245	356
25°	1143	1136	1121	1122	1118	526
35°	984	976	961	954	948	615
45°	803	795	778	767	763	619
55°	607	604	589	576	570	544
65°	412	406	396	385	380	407
75°	219	214	208	204	203	232
85°	57	57	55	55	54	62
90°	5	21	34	43	46	10
95°	91	105	116	120	120	99
105°	354	356	362	367	371	376
115°	663	663	660	659	657	654
125°	966	966	964	962	958	861
135°	1246	1255	1255	1252	1248	964
145°	1514	1520	1521	1520	1515	947
155°	1734	1734	1733	1739	1733	798
165°	1888	1883	1880	1889	1883	532
175°	1964	1956	1955	1966	1955	186
180°	1967	1967	1967	1967	1967	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1327.0	1327.0	1327.0	1327.0	1327.0
2.5°	1331.3	1328.1	1316.4	1327.0	1325.9
5°	1325.9	1321.7	1310.0	1321.7	1319.6
7.5°	1316.4	1312.1	1299.4	1308.9	1307.9
10°	1302.5	1298.3	1284.5	1293.0	1290.8
12.5°	1284.5	1280.2	1265.3	1274.9	1271.7
15°	1262.1	1257.9	1241.9	1248.3	1245.1
17.5°	1236.6	1231.3	1216.4	1220.7	1218.5
20°	1207.9	1202.6	1186.6	1189.8	1187.7
22.5°	1177.1	1169.6	1153.7	1160.1	1155.8
25°	1143.0	1135.6	1120.7	1121.8	1117.5
27.5°	1104.8	1097.3	1083.5	1081.4	1076.1
30°	1066.5	1058.0	1044.2	1039.9	1034.6
32.5°	1026.1	1018.6	1003.8	998.4	993.1
35°	983.6	976.1	961.2	953.8	948.5
37.5°	938.9	932.5	916.6	909.1	901.7
40°	895.3	886.8	870.8	860.2	854.9
42.5°	848.5	844.3	826.2	813.4	810.2
45°	802.8	795.3	778.3	766.6	763.4
47.5°	754.9	749.6	733.7	720.9	712.4
50°	706.0	701.8	686.9	672.0	665.6
52.5°	658.2	652.9	636.9	624.2	615.7
55°	607.1	604.0	589.1	576.3	569.9
57.5°	559.3	556.1	541.2	528.5	522.1
60°	509.3	504.0	490.2	480.6	475.3
62.5°	460.4	456.2	441.3	432.8	427.4
65°	411.5	406.2	395.5	384.9	379.6
67.5°	361.5	357.3	346.6	336.0	334.9
70°	315.8	308.4	299.9	291.3	288.2
72.5°	266.9	259.4	253.1	246.7	243.5
75°	219.0	213.7	208.4	204.2	203.1
77.5°	172.3	170.1	164.8	163.7	160.6
80°	130.8	127.6	125.5	123.3	122.3
82.5°	90.4	89.3	89.3	88.3	87.2
85°	57.4	57.4	55.3	55.3	54.2
87.5°	27.6	26.6	25.5	25.5	25.5
90°	4.6	21.3	33.5	42.6	45.6
92.5°	39.6	59.3	66.9	71.5	73.0
95°	91.3	105.0	115.6	120.2	120.2
97.5°	146.0	158.2	170.4	176.5	176.5
100°	213.0	219.1	232.8	235.8	235.8
102.5°	283.0	284.5	296.7	301.2	302.7
105°	354.5	356.0	362.1	366.6	371.2
107.5°	429.0	430.5	432.0	438.1	436.6
110°	505.1	508.1	506.6	503.5	508.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	584.2	584.2	581.1	581.1	581.1
115°	663.3	663.3	660.2	658.7	657.2
117.5°	737.8	737.8	736.3	731.7	727.2
120°	812.4	818.5	813.9	806.3	809.3
122.5°	890.0	891.5	890.0	885.4	877.8
125°	966.0	966.0	964.5	961.5	958.4
127.5°	1034.5	1039.0	1036.0	1033.0	1031.4
130°	1107.5	1112.1	1112.1	1109.0	1102.9
132.5°	1182.0	1185.1	1183.6	1180.5	1179.0
135°	1245.9	1255.1	1255.1	1252.0	1247.5
137.5°	1317.4	1322.0	1325.0	1320.5	1322.0
140°	1388.9	1392.0	1392.0	1390.5	1388.9
142.5°	1454.4	1457.4	1455.9	1455.9	1455.9
145°	1513.7	1519.8	1521.3	1519.8	1515.2
147.5°	1574.5	1582.1	1580.6	1579.1	1577.6
150°	1629.3	1635.4	1635.4	1635.4	1633.9
152.5°	1681.0	1684.1	1685.6	1690.2	1685.6
155°	1734.3	1734.3	1732.8	1738.8	1732.8
157.5°	1779.9	1776.9	1776.9	1781.4	1776.9
160°	1819.5	1817.9	1816.4	1821.0	1813.4
162.5°	1856.0	1851.4	1849.9	1859.0	1851.4
165°	1887.9	1883.4	1880.3	1889.4	1883.4
167.5°	1913.8	1907.7	1907.7	1916.8	1907.7
170°	1935.1	1927.5	1929.0	1938.1	1927.5
172.5°	1950.3	1944.2	1944.2	1954.9	1944.2
175°	1964.0	1956.4	1954.9	1965.5	1954.9
177.5°	1970.1	1962.5	1962.5	1973.1	1960.9
180°	1967.0	1967.0	1967.0	1967.0	1967.0

(END OF REPORT)