

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: P1033762

Luminaire Tested: S124DIW-B795D1560UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033762
REPORT IS A COMBINATION OF REPORTS P998134 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D1560UB50-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

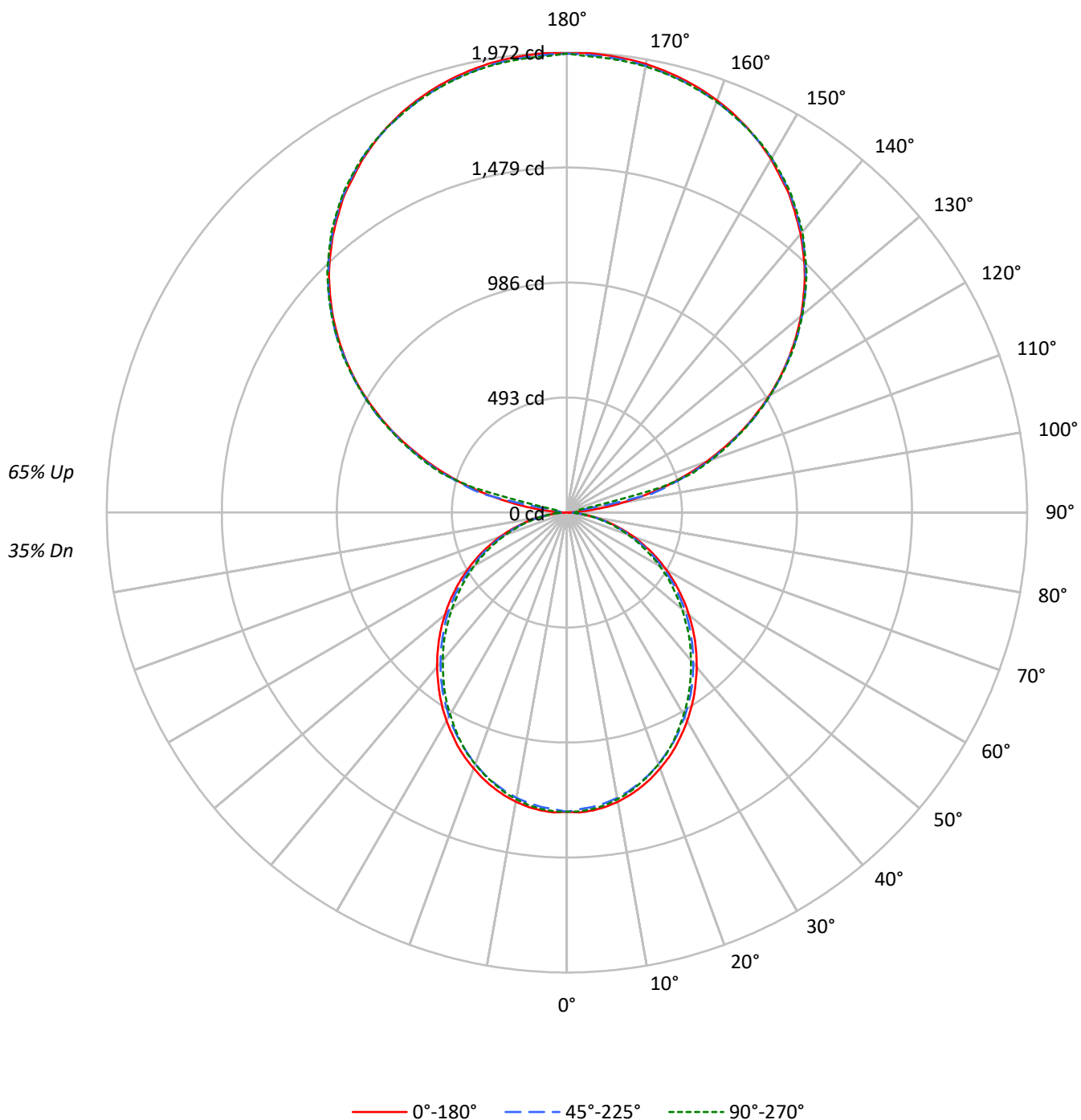
Lumens per Lamp: N/A
Luminaire Lumens: 9384.0 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42
1	94	90	86	83	85	82	78	76	66	63	61	51	50	48	37	37	36
2	86	79	73	68	77	71	66	62	58	54	51	45	42	40	33	31	30
3	78	69	62	56	71	63	57	52	51	46	43	40	37	34	29	27	26
4	72	61	53	48	64	56	49	44	45	40	36	35	32	29	26	24	22
5	66	54	46	41	59	49	43	37	40	35	31	32	28	25	23	21	19
6	60	49	41	35	54	44	37	32	36	31	27	28	25	22	21	19	17
7	56	44	36	31	50	40	33	28	33	28	24	26	22	19	19	17	15
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	15	13
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	16	14	12
10	45	33	26	21	41	30	24	20	25	20	17	20	16	14	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10462	10462	10462
5°	10470	10161	10174
10°	10382	9879	9810
15°	10233	9543	9399
20°	10043	9181	8975
25°	9829	8797	8518
30°	9571	8383	8016
35°	9303	7958	7531
40°	9025	7503	7014
45°	8733	7044	6532
50°	8409	6600	5998
55°	8058	6082	5467
60°	7697	5514	4915
65°	7285	4927	4292
70°	6811	4222	3625
75°	6104	3403	2904
80°	5199	2460	2042
85°	4039	1371	1098

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8733 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.9	1.3
10°-20°	340.7	3.6
20°-30°	501.4	5.3
30°-40°	582.8	6.2
40°-50°	582.8	6.2
50°-60°	509.7	5.4
60°-70°	378.4	4.0
70°-80°	214.7	2.3
80°-90°	65.6	0.7
90°-100°	65.3	0.7
100°-110°	430.0	4.6
110°-120°	821.2	8.8
120°-130°	1042.4	11.1
130°-140°	1115.2	11.9
140°-150°	1042.8	11.1
150°-160°	840.9	9.0
160°-170°	542.3	5.8
170°-180°	186.9	2.0
0°-30°	963.0	10.3
0°-40°	1545.9	16.5
0°-60°	2638.4	28.1
0°-90°	3297.1	35.1
90°-120°	1316.5	14.0
90°-150°	4516.8	48.1
90°-180°	6087.0	64.9
0°-180°	9384.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1283	1283	1283	1283	1283	
5°	1282	1278	1266	1278	1276	122
15°	1220	1216	1201	1207	1204	344
25°	1105	1098	1084	1085	1080	509
35°	951	944	929	922	917	595
45°	776	769	752	741	738	598
55°	587	584	570	557	551	526
65°	398	393	382	372	367	394
75°	212	207	202	197	196	225
85°	56	56	54	54	52	60
90°	4	21	32	41	44	8
95°	81	31	32	41	43	100
105°	443	452	459	472	419	463
115°	827	831	830	833	833	814
125°	1162	1168	1165	1170	1171	1038
135°	1442	1440	1446	1449	1452	1111
145°	1663	1667	1667	1668	1671	1039
155°	1823	1824	1820	1826	1822	841
165°	1923	1916	1916	1927	1914	543
175°	1967	1958	1960	1973	1955	187
180°	1967	1967	1967	1967	1967	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1283.0	1283.0	1283.0	1283.0	1283.0
2.5°	1287.1	1284.0	1272.7	1283.0	1281.9
5°	1281.9	1277.8	1266.5	1277.8	1275.8
7.5°	1272.7	1268.6	1256.2	1265.5	1264.5
10°	1259.3	1255.2	1241.9	1250.1	1248.0
12.5°	1241.9	1237.7	1223.3	1232.6	1229.5
15°	1220.3	1216.2	1200.7	1206.9	1203.8
17.5°	1195.6	1190.5	1176.1	1180.2	1178.1
20°	1167.8	1162.7	1147.3	1150.4	1148.3
22.5°	1138.0	1130.8	1115.4	1121.6	1117.5
25°	1105.1	1097.9	1083.5	1084.6	1080.5
27.5°	1068.1	1060.9	1047.6	1045.5	1040.4
30°	1031.1	1022.9	1009.5	1005.4	1000.3
32.5°	992.0	984.8	970.5	965.3	960.2
35°	950.9	943.7	929.3	922.1	917.0
37.5°	907.7	901.6	886.2	879.0	871.8
40°	865.6	857.4	842.0	831.7	826.5
42.5°	820.4	816.3	798.8	786.4	783.4
45°	776.2	769.0	752.5	741.2	738.1
47.5°	729.9	724.8	709.3	697.0	688.8
50°	682.6	678.5	664.1	649.7	643.5
52.5°	636.3	631.2	615.8	603.4	595.2
55°	587.0	583.9	569.5	557.2	551.0
57.5°	540.7	537.7	523.3	510.9	504.8
60°	492.4	487.3	473.9	464.7	459.5
62.5°	445.1	441.0	426.6	418.4	413.3
65°	397.8	392.7	382.4	372.1	367.0
67.5°	349.5	345.4	335.1	324.9	323.8
70°	305.3	298.1	289.9	281.7	278.6
72.5°	258.0	250.8	244.7	238.5	235.4
75°	211.8	206.6	201.5	197.4	196.4
77.5°	166.5	164.5	159.3	158.3	155.2
80°	126.4	123.4	121.3	119.3	118.2
82.5°	87.4	86.4	86.4	85.3	84.3
85°	55.5	55.5	53.5	53.5	52.4
87.5°	26.7	25.7	24.7	24.7	24.7
90°	4.4	20.6	32.4	41.2	44.1
92.5°	22.1	19.1	30.9	39.7	39.7
95°	80.9	30.9	32.4	41.2	42.7
97.5°	154.5	186.9	32.4	39.7	41.2
100°	241.3	267.8	64.7	39.7	41.2
102.5°	338.4	356.1	373.7	42.7	42.7
105°	442.9	451.7	459.0	472.3	419.3
107.5°	538.5	542.9	553.2	560.6	566.4
110°	635.6	640.0	648.8	651.8	656.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	729.8	738.6	741.5	740.1	745.9
115°	826.9	831.3	829.8	832.7	832.7
117.5°	913.7	919.6	924.0	922.5	922.5
120°	1001.9	1007.8	1006.4	1009.3	1006.4
122.5°	1084.3	1087.3	1090.2	1091.7	1088.8
125°	1162.3	1168.2	1165.3	1169.7	1171.1
127.5°	1237.4	1238.8	1246.2	1244.7	1243.2
130°	1309.4	1310.9	1315.3	1316.8	1316.8
132.5°	1375.7	1378.6	1384.5	1386.0	1384.5
135°	1441.9	1440.4	1446.3	1449.2	1452.2
137.5°	1500.7	1500.7	1508.1	1511.0	1509.5
140°	1558.1	1561.0	1564.0	1568.4	1569.9
142.5°	1609.6	1615.5	1616.9	1619.9	1619.9
145°	1662.6	1667.0	1667.0	1668.4	1671.4
147.5°	1703.8	1712.6	1711.1	1712.6	1714.1
150°	1749.4	1755.2	1753.8	1753.8	1755.2
152.5°	1787.6	1792.0	1789.1	1792.0	1790.6
155°	1822.9	1824.4	1820.0	1825.9	1821.5
157.5°	1853.8	1853.8	1847.9	1855.3	1847.9
160°	1880.3	1875.9	1874.4	1883.2	1874.4
162.5°	1903.8	1898.0	1896.5	1905.3	1895.0
165°	1923.0	1915.6	1915.6	1927.4	1914.1
167.5°	1939.2	1931.8	1930.3	1943.6	1928.9
170°	1952.4	1943.6	1945.0	1956.8	1942.1
172.5°	1961.2	1952.4	1953.9	1965.6	1949.5
175°	1967.1	1958.3	1959.8	1973.0	1955.3
177.5°	1971.5	1961.2	1964.2	1975.9	1958.3
180°	1967.1	1967.1	1967.1	1967.1	1967.1

(END OF REPORT)