

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: P1033748

Luminaire Tested: S124DIW-B795D1560UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033748
REPORT IS A COMBINATION OF REPORTS P998108 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D1560UB30-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

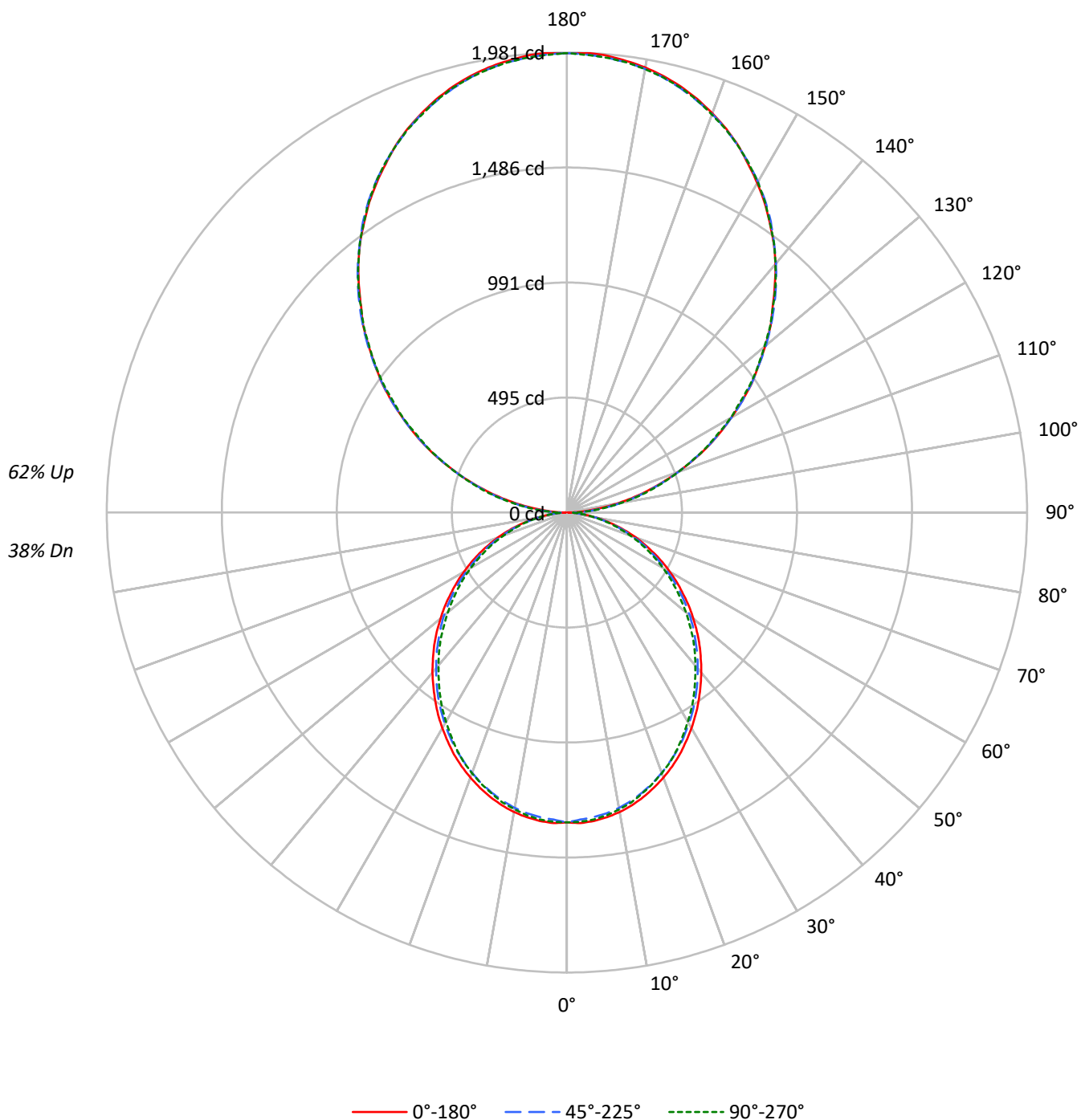
Lumens per Lamp: N/A
Luminaire Lumens: 8918.0 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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°	10881	10881	10881
5°	10890	10568	10581
10°	10798	10275	10203
15°	10643	9926	9777
20°	10445	9549	9334
25°	10223	9150	8859
30°	9954	8719	8338
35°	9676	8278	7833
40°	9387	7803	7296
45°	9083	7327	6794
50°	8747	6865	6238
55°	8380	6326	5687
60°	8007	5735	5111
65°	7578	5126	4464
70°	7086	4390	3770
75°	6349	3540	3019
80°	5408	2559	2125
85°	4199	1425	1142

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9083 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.8	1.4
10°-20°	354.3	4.0
20°-30°	521.5	5.8
30°-40°	606.2	6.8
40°-50°	606.2	6.8
50°-60°	530.2	5.9
60°-70°	393.6	4.4
70°-80°	223.3	2.5
80°-90°	68.2	0.8
90°-100°	129.0	1.4
100°-110°	386.2	4.3
110°-120°	656.1	7.4
120°-130°	865.3	9.7
130°-140°	971.9	10.9
140°-150°	955.2	10.7
150°-160°	803.4	9.0
160°-170°	534.5	6.0
170°-180°	187.2	2.1
0°-30°	1001.6	11.2
0°-40°	1607.8	18.0
0°-60°	2744.1	30.8
0°-90°	3429.2	38.5
90°-120°	1171.3	13.1
90°-150°	3963.7	44.4
90°-180°	5489.0	61.5
0°-180°	8918.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1334	1334	1334	1334	1334	
5°	1333	1329	1317	1329	1327	127
15°	1269	1265	1249	1255	1252	358
25°	1149	1142	1127	1128	1124	529
35°	989	982	967	959	954	618
45°	807	800	783	771	768	622
55°	610	607	592	580	573	547
65°	414	408	398	387	382	410
75°	220	215	210	205	204	234
85°	58	58	56	56	54	62
90°	5	21	34	43	46	11
95°	92	106	116	121	121	99
105°	356	358	364	369	373	378
115°	667	667	664	662	661	658
125°	972	972	970	967	964	866
135°	1253	1262	1262	1259	1254	969
145°	1522	1528	1530	1528	1524	953
155°	1744	1744	1743	1749	1743	803
165°	1899	1894	1891	1900	1894	535
175°	1975	1968	1966	1977	1966	188
180°	1978	1978	1978	1978	1978	

TEST NUMBER: P1033748

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1334.4	1334.4	1334.4	1334.4	1334.4
2.5°	1338.7	1335.5	1323.7	1334.4	1333.3
5°	1333.3	1329.1	1317.3	1329.1	1326.9
7.5°	1323.7	1319.4	1306.6	1316.2	1315.2
10°	1309.8	1305.5	1291.6	1300.2	1298.0
12.5°	1291.6	1287.4	1272.4	1282.0	1278.8
15°	1269.2	1264.9	1248.9	1255.3	1252.1
17.5°	1243.5	1238.2	1223.2	1227.5	1225.3
20°	1214.6	1209.3	1193.3	1196.5	1194.3
22.5°	1183.6	1176.2	1160.1	1166.5	1162.3
25°	1149.4	1141.9	1127.0	1128.0	1123.8
27.5°	1110.9	1103.4	1089.5	1087.4	1082.1
30°	1072.4	1063.9	1050.0	1045.7	1040.4
32.5°	1031.8	1024.3	1009.4	1004.0	998.7
35°	989.0	981.6	966.6	959.1	953.8
37.5°	944.1	937.7	921.7	914.2	906.7
40°	900.3	891.7	875.7	865.0	859.7
42.5°	853.2	849.0	830.8	818.0	814.8
45°	807.3	799.8	782.7	770.9	767.7
47.5°	759.2	753.8	737.8	724.9	716.4
50°	710.0	705.7	690.7	675.8	669.3
52.5°	661.9	656.5	640.5	627.6	619.1
55°	610.5	607.3	592.4	579.5	573.1
57.5°	562.4	559.2	544.2	531.4	525.0
60°	512.2	506.8	492.9	483.3	477.9
62.5°	463.0	458.7	443.7	435.2	429.8
65°	413.8	408.4	397.8	387.1	381.7
67.5°	363.5	359.3	348.6	337.9	336.8
70°	317.6	310.1	301.5	293.0	289.8
72.5°	268.4	260.9	254.5	248.1	244.9
75°	220.3	214.9	209.6	205.3	204.2
77.5°	173.2	171.1	165.7	164.7	161.5
80°	131.5	128.3	126.2	124.0	123.0
82.5°	90.9	89.8	89.8	88.7	87.7
85°	57.7	57.7	55.6	55.6	54.5
87.5°	27.8	26.7	25.7	25.7	25.7
90°	4.6	21.4	33.7	42.8	45.9
92.5°	39.8	59.7	67.3	71.9	73.4
95°	91.8	105.6	116.3	120.9	120.9
97.5°	146.9	159.1	171.4	177.5	177.5
100°	214.2	220.3	234.1	237.1	237.1
102.5°	284.6	286.1	298.3	302.9	304.5
105°	356.5	358.0	364.1	368.7	373.3
107.5°	431.4	433.0	434.5	440.6	439.1
110°	507.9	511.0	509.5	506.4	511.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	587.5	587.5	584.4	584.4	584.4
115°	667.0	667.0	664.0	662.5	660.9
117.5°	742.0	742.0	740.5	735.9	731.3
120°	817.0	823.1	818.5	810.9	813.9
122.5°	895.0	896.5	895.0	890.4	882.8
125°	971.5	971.5	970.0	966.9	963.9
127.5°	1040.4	1044.9	1041.9	1038.8	1037.3
130°	1113.8	1118.4	1118.4	1115.3	1109.2
132.5°	1188.8	1191.8	1190.3	1187.2	1185.7
135°	1253.0	1262.2	1262.2	1259.1	1254.5
137.5°	1324.9	1329.5	1332.6	1328.0	1329.5
140°	1396.8	1399.9	1399.9	1398.4	1396.8
142.5°	1462.6	1465.7	1464.1	1464.1	1464.1
145°	1522.3	1528.4	1529.9	1528.4	1523.8
147.5°	1583.5	1591.1	1589.6	1588.1	1586.5
150°	1638.6	1644.7	1644.7	1644.7	1643.1
152.5°	1690.6	1693.6	1695.2	1699.8	1695.2
155°	1744.1	1744.1	1742.6	1748.7	1742.6
157.5°	1790.0	1787.0	1787.0	1791.5	1787.0
160°	1829.8	1828.3	1826.7	1831.3	1823.7
162.5°	1866.5	1861.9	1860.4	1869.6	1861.9
165°	1898.6	1894.1	1891.0	1900.2	1894.1
167.5°	1924.7	1918.5	1918.5	1927.7	1918.5
170°	1946.1	1938.4	1939.9	1949.1	1938.4
172.5°	1961.4	1955.2	1955.2	1966.0	1955.2
175°	1975.1	1967.5	1966.0	1976.7	1966.0
177.5°	1981.3	1973.6	1973.6	1984.3	1972.1
180°	1978.2	1978.2	1978.2	1978.2	1978.2

(END OF REPORT)