

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: P1033774

Luminaire Tested: S124DIW-B795D470UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033774
REPORT IS A COMBINATION OF REPORTS P998173 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D470UB30-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

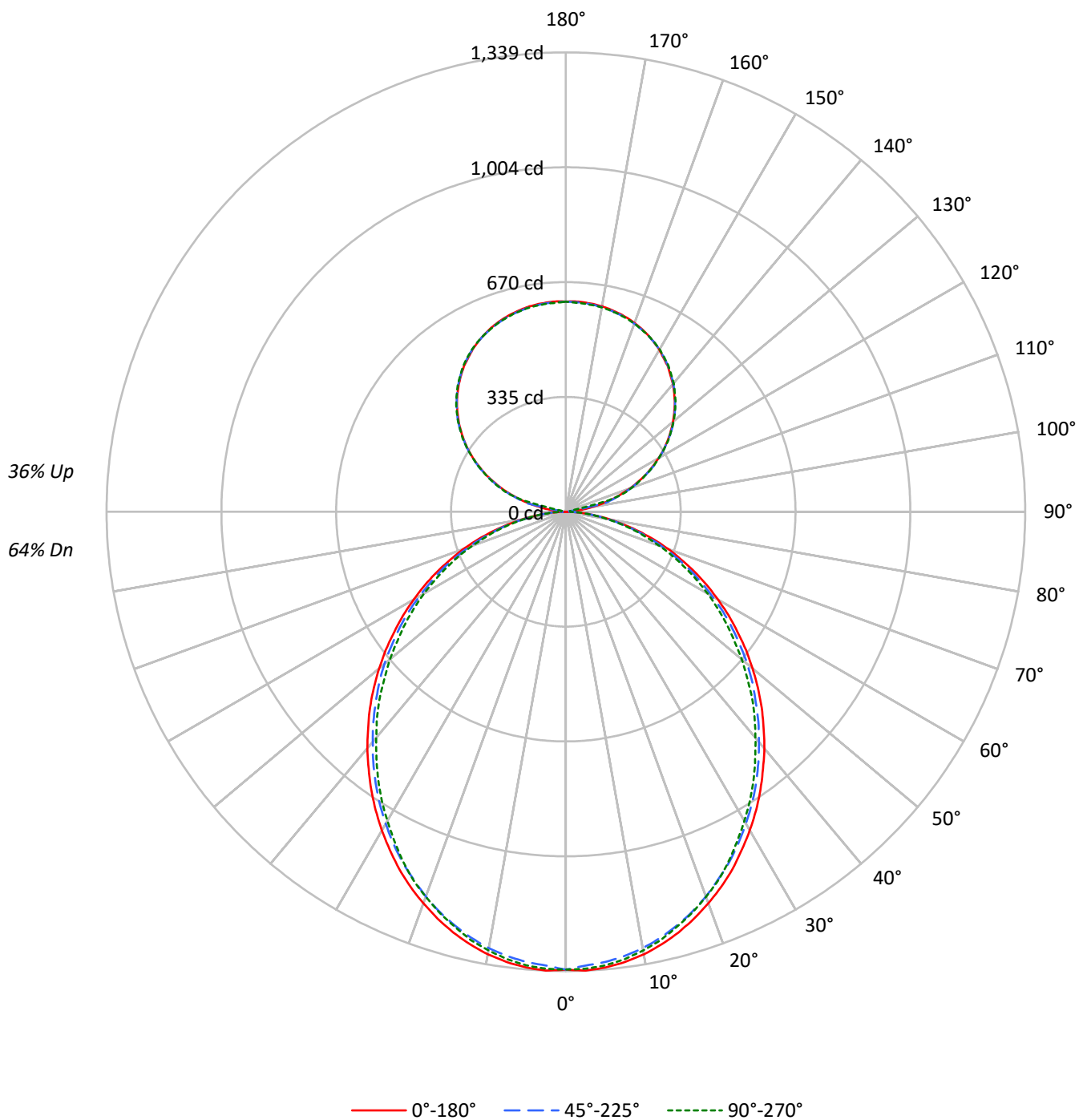
Lumens per Lamp: N/A
Luminaire Lumens: 5322.0 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 49.1
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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69
1	101	97	93	89	95	91	87	84	80	77	75	70	68	67	61	60	59
2	92	84	78	73	86	79	74	69	70	66	62	62	58	56	54	51	49
3	84	74	67	61	78	70	63	58	62	57	52	55	50	47	48	45	42
4	77	66	58	51	72	62	55	49	55	49	45	49	44	40	43	39	36
5	71	59	50	44	66	55	48	42	49	43	39	44	39	35	38	35	32
6	65	53	44	38	61	50	42	37	45	38	34	40	35	31	35	31	28
7	60	48	39	34	56	45	38	32	40	34	30	36	31	27	32	28	25
8	56	43	35	30	53	41	34	29	37	31	27	33	28	24	29	25	22
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	27	23	20
10	49	36	29	24	46	35	28	23	31	26	22	28	23	20	25	21	18

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	2.4
10°-20°	354.3	6.7
20°-30°	521.5	9.8
30°-40°	606.2	11.4
40°-50°	606.2	11.4
50°-60°	530.2	10.0
60°-70°	393.6	7.4
70°-80°	223.3	4.2
80°-90°	65.2	1.2
90°-100°	20.3	0.4
100°-110°	133.9	2.5
110°-120°	255.7	4.8
120°-130°	324.6	6.1
130°-140°	347.3	6.5
140°-150°	324.8	6.1
150°-160°	261.9	4.9
160°-170°	168.9	3.2
170°-180°	58.2	1.1
0°-30°	1001.6	18.8
0°-40°	1607.8	30.2
0°-60°	2744.1	51.6
0°-90°	3426.3	64.4
90°-120°	410.0	7.7
90°-150°	1406.7	26.4
90°-180°	1896.0	35.6
0°-180°	5322.0	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°	1	6	10	13	14	5
95°	25	10	10	13	13	31
105°	138	141	143	147	131	144
115°	258	259	258	259	259	253
125°	362	364	363	364	365	323
135°	449	449	450	451	452	346
145°	518	519	519	520	520	324
155°	568	568	567	569	567	262
165°	599	597	597	600	596	169
175°	613	610	610	614	609	58
180°	613	613	613	613	613	

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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°	1.4	6.4	10.1	12.8	13.7
92.5°	6.9	6.0	9.6	12.4	12.4
95°	25.2	9.6	10.1	12.8	13.3
97.5°	48.1	58.2	10.1	12.4	12.8
100°	75.1	83.4	20.2	12.4	12.8
102.5°	105.4	110.9	116.4	13.3	13.3
105°	137.9	140.7	143.0	147.1	130.6
107.5°	167.7	169.1	172.3	174.6	176.4
110°	198.0	199.3	202.1	203.0	204.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	227.3	230.0	230.9	230.5	232.3
115°	257.5	258.9	258.4	259.4	259.4
117.5°	284.6	286.4	287.8	287.3	287.3
120°	312.0	313.9	313.4	314.3	313.4
122.5°	337.7	338.6	339.5	340.0	339.1
125°	362.0	363.8	362.9	364.3	364.7
127.5°	385.4	385.8	388.1	387.7	387.2
130°	407.8	408.3	409.7	410.1	410.1
132.5°	428.4	429.4	431.2	431.6	431.2
135°	449.1	448.6	450.4	451.3	452.3
137.5°	467.4	467.4	469.7	470.6	470.1
140°	485.3	486.2	487.1	488.5	488.9
142.5°	501.3	503.1	503.6	504.5	504.5
145°	517.8	519.2	519.2	519.6	520.5
147.5°	530.6	533.4	532.9	533.4	533.8
150°	544.8	546.7	546.2	546.2	546.7
152.5°	556.7	558.1	557.2	558.1	557.7
155°	567.7	568.2	566.8	568.7	567.3
157.5°	577.4	577.4	575.5	577.8	575.5
160°	585.6	584.2	583.8	586.5	583.8
162.5°	592.9	591.1	590.6	593.4	590.2
165°	598.9	596.6	596.6	600.3	596.1
167.5°	603.9	601.6	601.2	605.3	600.7
170°	608.1	605.3	605.8	609.4	604.9
172.5°	610.8	608.1	608.5	612.2	607.1
175°	612.6	609.9	610.4	614.5	609.0
177.5°	614.0	610.8	611.7	615.4	609.9
180°	612.6	612.6	612.6	612.6	612.6

(END OF REPORT)