

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: P1033075

Luminaire Tested: S124RDIW-B795D470UB2750-4F0-XX-W2A-F_2700K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033075
REPORT IS A COMBINATION OF REPORTS P1000846 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B795D470UB2750-4F0-XX-W2A-F_2700K
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

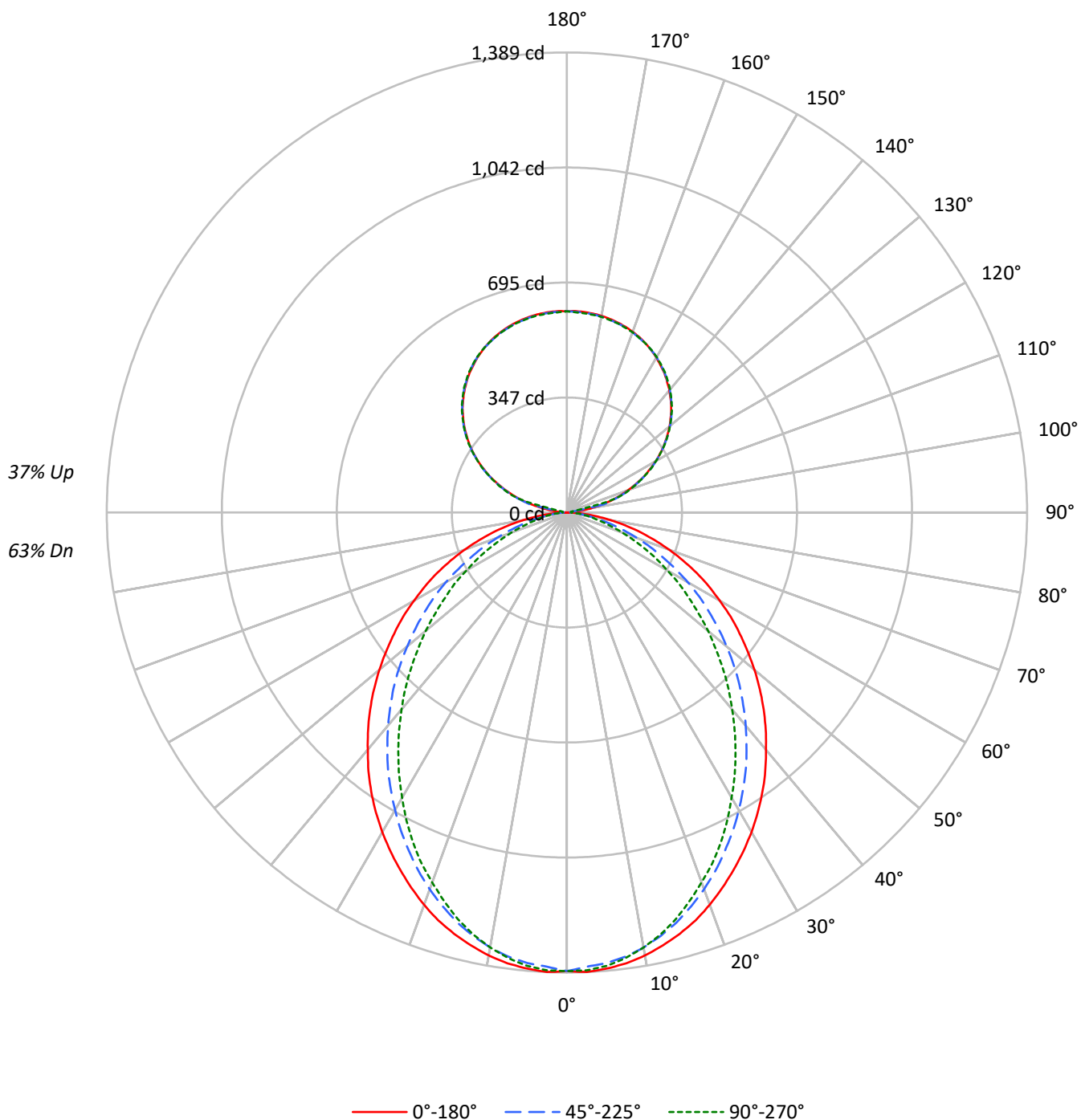
Lumens per Lamp: N/A
Luminaire Lumens: 5080.0 lumens
Efficiency: N/A
Efficacy: 103.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	50	30	10
RCR																				
0	110	110	110	110	103	103	103	103	91	91	91	79	79	79	68	68	68	68	68	63
1	101	97	93	89	95	91	88	85	80	78	75	70	68	66	61	59	58	58	58	54
2	92	85	79	74	86	80	75	70	71	66	63	62	59	56	54	52	50	50	50	46
3	84	75	68	62	79	71	64	59	63	57	53	55	51	48	48	45	43	43	43	39
4	77	67	59	53	72	63	56	50	56	50	46	49	45	41	43	40	37	37	37	34
5	71	60	51	45	67	56	49	43	50	44	40	44	40	36	39	35	32	32	32	29
6	66	54	45	40	62	51	43	38	45	39	35	40	35	32	35	32	29	29	29	26
7	61	49	41	35	57	46	39	34	41	35	31	37	32	28	32	29	26	26	26	23
8	57	44	36	31	53	42	35	30	38	32	28	34	29	25	30	26	23	23	23	21
9	53	41	33	28	50	39	32	27	35	29	25	31	26	23	28	24	21	21	21	19
10	49	37	30	25	46	35	29	24	32	26	23	29	24	21	26	22	19	19	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11290	11290	11290
5°	11291	10954	10956
10°	11195	10609	10482
15°	11041	10178	9925
20°	10840	9688	9288
25°	10588	9158	8666
30°	10342	8618	7969
35°	10071	8071	7287
40°	9749	7481	6586
45°	9446	6897	5892
50°	9103	6258	5188
55°	8732	5603	4460
60°	8319	4909	3741
65°	7921	4112	3050
70°	7356	3272	2331
75°	6628	2381	1629
80°	5536	1462	1171
85°	4162	843	643

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9446 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	2.6
10°-20°	363.0	7.1
20°-30°	524.1	10.3
30°-40°	593.9	11.7
40°-50°	573.5	11.3
50°-60°	476.8	9.4
60°-70°	329.1	6.5
70°-80°	166.3	3.3
80°-90°	43.5	0.9
90°-100°	20.2	0.4
100°-110°	132.8	2.6
110°-120°	253.6	5.0
120°-130°	321.9	6.3
130°-140°	344.4	6.8
140°-150°	322.0	6.3
150°-160°	259.7	5.1
160°-170°	167.5	3.3
170°-180°	57.7	1.1
0°-30°	1017.2	20.0
0°-40°	1611.2	31.7
0°-60°	2661.4	52.4
0°-90°	3200.3	63.0
90°-120°	406.6	8.0
90°-150°	1394.9	27.5
90°-180°	1880.0	37.0
0°-180°	5080.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1384	1384	1384	1384	1384	
5°	1382	1378	1365	1376	1374	131
15°	1317	1307	1281	1278	1271	371
25°	1190	1171	1128	1110	1099	549
35°	1029	995	942	906	887	643
45°	840	800	737	685	666	647
55°	636	594	525	470	450	569
65°	432	387	319	274	261	427
75°	230	191	141	117	110	243
85°	57	36	33	31	31	63
90°	1	6	10	13	14	5
95°	25	10	10	13	13	31
105°	137	140	142	146	130	143
115°	255	257	256	257	257	251
125°	359	361	360	361	362	321
135°	445	445	447	448	448	343
145°	513	515	515	515	516	321
155°	563	563	562	564	562	260
165°	594	592	592	595	591	168
175°	608	605	605	609	604	58
180°	608	608	608	608	608	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1384.5	1384.5	1384.5	1384.5	1384.5
2.5°	1388.7	1384.5	1372.8	1384.5	1383.4
5°	1382.4	1378.1	1365.4	1376.0	1373.9
7.5°	1372.8	1368.6	1352.7	1360.1	1356.9
10°	1358.0	1352.7	1333.6	1337.8	1333.6
12.5°	1338.9	1332.5	1309.2	1311.3	1305.0
15°	1316.6	1307.1	1280.6	1278.5	1271.1
17.5°	1291.2	1277.4	1246.7	1241.4	1230.8
20°	1260.5	1246.7	1210.6	1202.1	1188.4
22.5°	1226.5	1210.6	1171.4	1157.6	1147.0
25°	1190.5	1171.4	1127.9	1109.9	1099.3
27.5°	1153.4	1130.1	1084.5	1063.3	1048.4
30°	1114.2	1087.7	1037.8	1011.3	994.4
32.5°	1072.8	1042.1	990.1	958.3	942.4
35°	1029.4	995.4	942.4	906.4	887.3
37.5°	983.8	948.8	890.5	851.3	832.2
40°	935.0	900.0	839.6	795.1	776.0
42.5°	888.4	851.3	787.7	742.1	721.9
45°	839.6	800.4	736.8	684.8	665.7
47.5°	789.8	749.5	683.8	629.7	608.5
50°	738.9	697.5	629.7	576.7	556.6
52.5°	686.9	646.7	576.7	522.6	501.4
55°	636.1	593.7	524.7	469.6	449.5
57.5°	586.2	541.7	473.9	417.7	402.8
60°	532.2	489.8	421.9	366.8	349.8
62.5°	483.4	438.9	368.9	319.1	306.4
65°	432.5	386.9	319.1	273.5	260.8
67.5°	379.5	336.1	272.4	232.2	217.3
70°	329.7	285.2	224.7	189.8	179.2
72.5°	276.7	237.5	181.3	152.7	143.1
75°	230.0	190.8	141.0	116.6	110.2
77.5°	181.3	147.4	104.9	88.0	85.9
80°	134.6	103.9	72.1	68.9	67.8
82.5°	94.3	66.8	51.9	49.8	48.8
85°	57.2	36.0	32.9	30.7	30.7
87.5°	24.4	15.9	14.8	13.8	14.8
90°	1.4	6.4	10.0	12.7	13.6
92.5°	6.8	5.9	9.5	12.3	12.3
95°	25.0	9.5	10.0	12.7	13.2
97.5°	47.7	57.7	10.0	12.3	12.7
100°	74.5	82.7	20.0	12.3	12.7
102.5°	104.5	110.0	115.4	13.2	13.2
105°	136.8	139.5	141.8	145.8	129.5
107.5°	166.3	167.7	170.8	173.1	174.9
110°	196.3	197.6	200.4	201.3	202.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.4	228.1	229.0	228.5	230.4
115°	255.3	256.7	256.3	257.2	257.2
117.5°	282.2	284.0	285.3	284.9	284.9
120°	309.4	311.2	310.8	311.7	310.8
122.5°	334.9	335.8	336.7	337.1	336.2
125°	358.9	360.8	359.9	361.2	361.7
127.5°	382.1	382.6	384.8	384.4	383.9
130°	404.4	404.8	406.2	406.7	406.7
132.5°	424.8	425.7	427.6	428.0	427.6
135°	445.3	444.8	446.6	447.5	448.5
137.5°	463.4	463.4	465.7	466.6	466.2
140°	481.2	482.1	483.0	484.3	484.8
142.5°	497.1	498.9	499.3	500.2	500.2
145°	513.4	514.8	514.8	515.2	516.2
147.5°	526.1	528.9	528.4	528.9	529.3
150°	540.2	542.0	541.6	541.6	542.0
152.5°	552.0	553.4	552.5	553.4	553.0
155°	562.9	563.4	562.0	563.9	562.5
157.5°	572.5	572.5	570.7	572.9	570.7
160°	580.7	579.3	578.9	581.6	578.9
162.5°	587.9	586.1	585.7	588.4	585.2
165°	593.8	591.6	591.6	595.2	591.1
167.5°	598.8	596.6	596.1	600.2	595.7
170°	602.9	600.2	600.7	604.3	599.8
172.5°	605.7	602.9	603.4	607.0	602.0
175°	607.5	604.8	605.2	609.3	603.8
177.5°	608.8	605.7	606.6	610.2	604.8
180°	607.5	607.5	607.5	607.5	607.5

(END OF REPORT)