

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: P1034277

Luminaire Tested: S124RDIW-B795D470UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034277
REPORT IS A COMBINATION OF REPORTS P1000835 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B795D470UB27-4F0-XX-W2A-F1
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

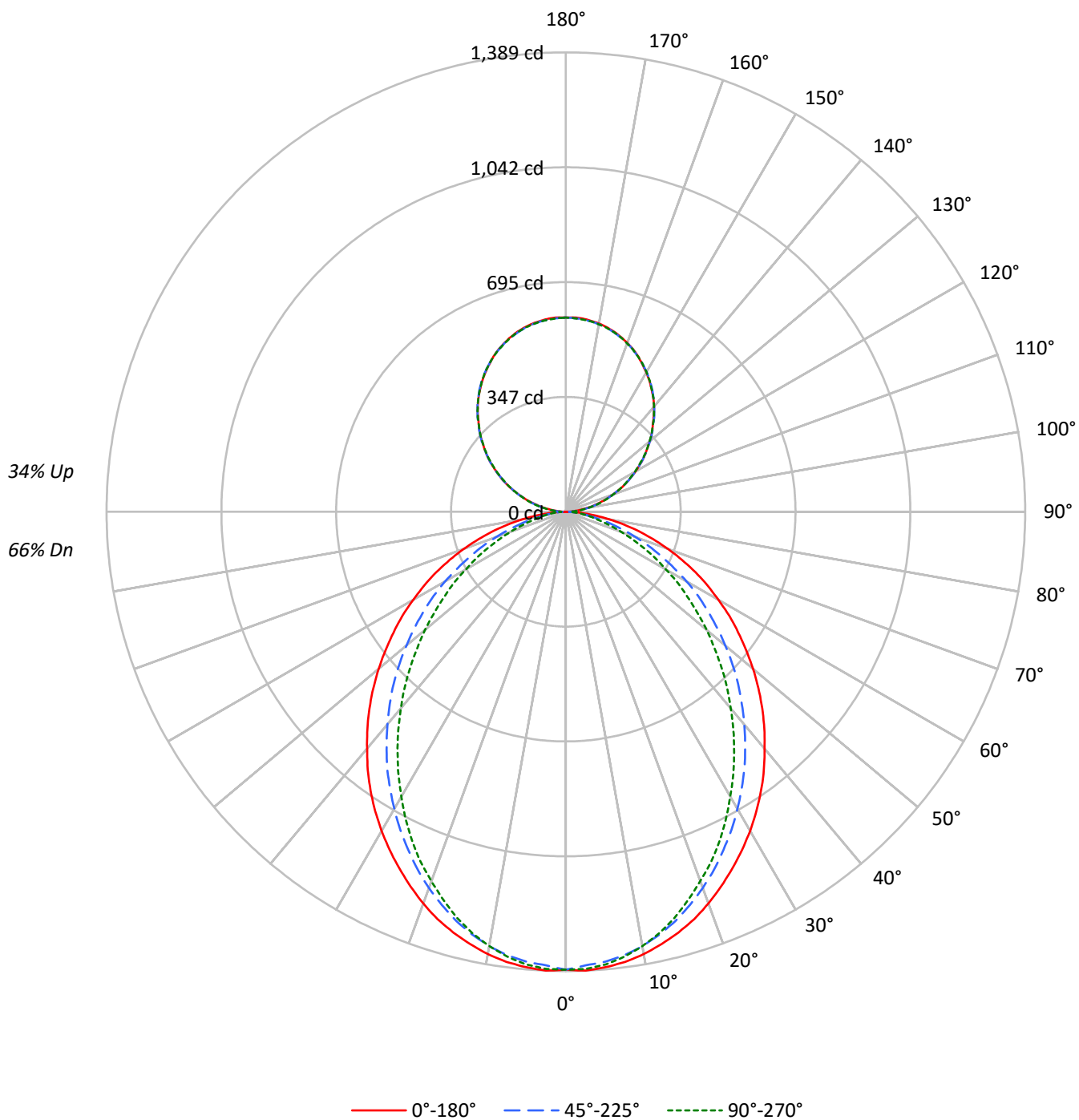
Lumens per Lamp: N/A
Luminaire Lumens: 4830.0 lumens
Efficiency: N/A
Efficacy: 98.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

TEST NUMBER: P1034277

CATALOG NUMBER: S124RDIW-B795D470UB27-4F0-XX-W2A-F1

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	105	105	105	105	92	92	92	81	81	81	71	71	71
1	102	98	94	90	96	92	89	86	82	79	77	72	70	69	63	62	61
2	93	86	79	74	87	81	75	71	72	68	64	64	61	58	56	54	52
3	85	76	68	62	80	71	65	60	64	59	54	57	53	49	50	47	44
4	78	67	59	53	73	64	56	51	57	51	47	51	46	43	45	41	39
5	72	60	52	46	67	57	50	44	51	45	41	46	41	37	41	37	34
6	66	54	46	40	62	51	44	39	46	40	36	42	37	33	37	33	30
7	61	49	41	35	58	47	39	34	42	36	32	38	33	29	34	30	27
8	57	45	37	31	54	43	35	30	39	33	28	35	30	26	31	27	24
9	53	41	33	28	50	39	32	27	35	30	25	32	27	24	29	25	22
10	50	38	30	26	47	36	29	25	33	27	23	30	25	21	27	23	20

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

TEST NUMBER: P1034277

CATALOG NUMBER: S124RDIW-B795D470UB27-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	2.7
10°-20°	363.0	7.5
20°-30°	524.1	10.9
30°-40°	593.9	12.3
40°-50°	573.5	11.9
50°-60°	476.8	9.9
60°-70°	329.1	6.8
70°-80°	166.3	3.4
80°-90°	43.5	0.9
90°-100°	38.3	0.8
100°-110°	114.7	2.4
110°-120°	194.8	4.0
120°-130°	256.9	5.3
130°-140°	288.6	6.0
140°-150°	283.6	5.9
150°-160°	238.5	4.9
160°-170°	158.7	3.3
170°-180°	55.6	1.2
0°-30°	1017.2	21.1
0°-40°	1611.2	33.4
0°-60°	2661.4	55.1
0°-90°	3200.3	66.3
90°-120°	347.8	7.2
90°-150°	1176.9	24.4
90°-180°	1630.0	33.7
0°-180°	4830.0	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°	27	31	34	36	36	30
105°	106	106	108	110	111	112
115°	198	198	197	197	196	195
125°	288	288	288	287	286	257
135°	372	375	375	374	372	288
145°	452	454	454	454	452	283
155°	518	518	517	519	517	238
165°	564	562	562	564	562	159
175°	586	584	584	587	584	56
180°	587	587	587	587	587	

TEST NUMBER: P1034277

CATALOG NUMBER: S124RDIW-B795D470UB27-4F0-XX-W2A-F1

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°	11.8	17.7	20.0	21.4	21.8
95°	27.3	31.3	34.5	35.9	35.9
97.5°	43.6	47.2	50.9	52.7	52.7
100°	63.6	65.4	69.5	70.4	70.4
102.5°	84.5	84.9	88.6	89.9	90.4
105°	105.8	106.3	108.1	109.5	110.8
107.5°	128.1	128.6	129.0	130.8	130.4
110°	150.8	151.7	151.3	150.4	151.7



TEST NUMBER: P1034277

CATALOG NUMBER: S124RDIW-B795D470UB27-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174.4	174.4	173.5	173.5	173.5
115°	198.1	198.1	197.2	196.7	196.2
117.5°	220.3	220.3	219.9	218.5	217.1
120°	242.6	244.4	243.0	240.8	241.7
122.5°	265.7	266.2	265.7	264.4	262.1
125°	288.5	288.5	288.0	287.1	286.2
127.5°	308.9	310.3	309.4	308.5	308.0
130°	330.7	332.1	332.1	331.2	329.3
132.5°	353.0	353.9	353.4	352.5	352.1
135°	372.0	374.8	374.8	373.9	372.5
137.5°	393.4	394.8	395.7	394.3	394.8
140°	414.7	415.7	415.7	415.2	414.7
142.5°	434.3	435.2	434.7	434.7	434.7
145°	452.0	453.8	454.3	453.8	452.5
147.5°	470.2	472.4	472.0	471.5	471.1
150°	486.5	488.3	488.3	488.3	487.9
152.5°	502.0	502.9	503.3	504.7	503.3
155°	517.9	517.9	517.4	519.2	517.4
157.5°	531.5	530.6	530.6	532.0	530.6
160°	543.3	542.9	542.4	543.8	541.5
162.5°	554.2	552.8	552.4	555.1	552.8
165°	563.8	562.4	561.5	564.2	562.4
167.5°	571.5	569.7	569.7	572.4	569.7
170°	577.8	575.6	576.0	578.7	575.6
172.5°	582.4	580.6	580.6	583.7	580.6
175°	586.5	584.2	583.7	586.9	583.7
177.5°	588.3	586.0	586.0	589.2	585.6
180°	587.4	587.4	587.4	587.4	587.4

(END OF REPORT)