

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: P1034289

Luminaire Tested: S124RDIW-B795D470UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034289
REPORT IS A COMBINATION OF REPORTS P1000867 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B795D470UB40-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

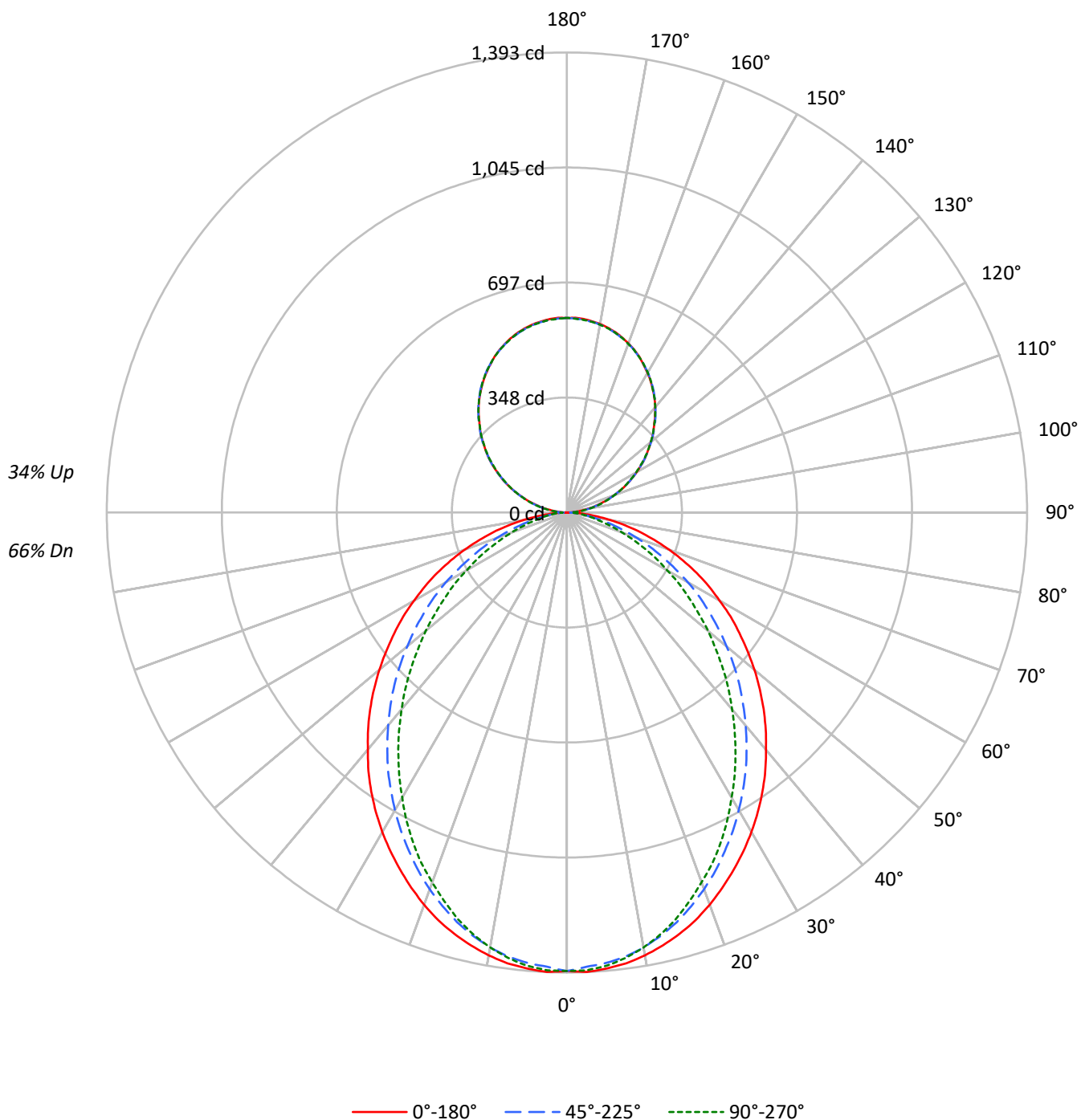
Lumens per Lamp: N/A
Luminaire Lumens: 4844.0 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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					0
RW	70	50	30	10	70	50	30	10	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	66		
1	102	98	94	90	96	92	89	86	82	79	77	72	70	69	63	62	61	57		
2	93	86	79	74	87	81	75	71	72	68	64	64	61	58	56	54	52	48		
3	85	76	68	62	80	71	65	60	64	59	54	57	53	49	50	47	44	41		
4	78	67	59	53	73	64	56	51	57	51	47	51	46	43	45	41	39	35		
5	72	60	52	46	67	57	50	44	51	45	41	46	41	37	41	37	34	31		
6	66	54	46	40	62	51	44	39	46	40	36	42	37	33	37	33	30	27		
7	61	49	41	35	58	47	39	34	42	36	32	38	33	29	34	30	27	24		
8	57	45	37	31	54	43	35	30	39	33	28	35	30	26	31	27	24	22		
9	53	41	33	28	50	39	32	27	35	30	25	32	27	24	29	25	22	20		
10	50	38	30	26	47	36	29	25	33	27	23	30	25	21	27	23	20	18		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11322	11322	11322
5°	11323	10985	10986
10°	11227	10639	10512
15°	11072	10207	9952
20°	10870	9715	9314
25°	10617	9184	8691
30°	10371	8643	7991
35°	10099	8094	7307
40°	9776	7503	6605
45°	9473	6916	5908
50°	9128	6276	5202
55°	8755	5619	4472
60°	8343	4923	3752
65°	7942	4123	3058
70°	7376	3282	2338
75°	6648	2388	1635
80°	5552	1466	1175
85°	4177	846	646

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9473 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.6	2.7
10°-20°	364.0	7.5
20°-30°	525.5	10.8
30°-40°	595.6	12.3
40°-50°	575.1	11.9
50°-60°	478.1	9.9
60°-70°	330.0	6.8
70°-80°	166.8	3.4
80°-90°	43.6	0.9
90°-100°	38.4	0.8
100°-110°	115.0	2.4
110°-120°	195.4	4.0
120°-130°	257.7	5.3
130°-140°	289.5	6.0
140°-150°	284.5	5.9
150°-160°	239.3	4.9
160°-170°	159.2	3.3
170°-180°	55.7	1.2
0°-30°	1020.1	21.1
0°-40°	1615.7	33.4
0°-60°	2668.9	55.1
0°-90°	3209.3	66.3
90°-120°	348.8	7.2
90°-150°	1180.5	24.4
90°-180°	1635.0	33.8
0°-180°	4844.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1388	1388	1388	1388	1388	
5°	1386	1382	1369	1380	1378	132
15°	1320	1311	1284	1282	1275	372
25°	1194	1175	1131	1113	1102	550
35°	1032	998	945	909	890	645
45°	842	803	739	687	668	649
55°	638	595	526	471	451	571
65°	434	388	320	274	262	428
75°	231	191	141	117	111	243
85°	57	36	33	31	31	63
90°	1	6	10	13	14	5
95°	27	31	35	36	36	30
105°	106	107	108	110	111	113
115°	199	199	198	197	197	196
125°	289	289	289	288	287	258
135°	373	376	376	375	374	289
145°	453	455	456	455	454	284
155°	520	520	519	521	519	239
165°	566	564	563	566	564	159
175°	588	586	586	589	586	56
180°	589	589	589	589	589	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1388.4	1388.4	1388.4	1388.4	1388.4
2.5°	1392.6	1388.4	1376.7	1388.4	1387.3
5°	1386.3	1382.0	1369.2	1379.9	1377.7
7.5°	1376.7	1372.4	1356.5	1363.9	1360.7
10°	1361.8	1356.5	1337.4	1341.6	1337.4
12.5°	1342.7	1336.3	1312.9	1315.0	1308.6
15°	1320.3	1310.8	1284.2	1282.1	1274.6
17.5°	1294.8	1281.0	1250.2	1244.9	1234.2
20°	1264.0	1250.2	1214.0	1205.5	1191.7
22.5°	1230.0	1214.0	1174.7	1160.9	1150.3
25°	1193.8	1174.7	1131.1	1113.0	1102.4
27.5°	1156.6	1133.2	1087.5	1066.3	1051.4
30°	1117.3	1090.7	1040.8	1014.2	997.2
32.5°	1075.8	1045.0	992.9	961.0	945.1
35°	1032.2	998.2	945.1	908.9	889.8
37.5°	986.5	951.5	893.0	853.7	834.5
40°	937.6	902.6	842.0	797.3	778.2
42.5°	890.9	853.7	789.9	744.2	724.0
45°	842.0	802.6	738.8	686.7	667.6
47.5°	792.0	751.6	685.7	631.5	610.2
50°	741.0	699.5	631.5	578.3	558.1
52.5°	688.9	648.5	578.3	524.1	502.8
55°	637.8	595.3	526.2	470.9	450.7
57.5°	587.9	543.2	475.2	418.9	404.0
60°	533.7	491.1	423.1	367.8	350.8
62.5°	484.8	440.1	370.0	320.0	307.2
65°	433.7	388.0	320.0	274.3	261.5
67.5°	380.6	337.0	273.2	232.8	217.9
70°	330.6	286.0	225.4	190.3	179.7
72.5°	277.5	238.1	181.8	153.1	143.5
75°	230.7	191.4	141.4	116.9	110.6
77.5°	181.8	147.8	105.2	88.2	86.1
80°	135.0	104.2	72.3	69.1	68.0
82.5°	94.6	67.0	52.1	50.0	48.9
85°	57.4	36.1	33.0	30.8	30.8
87.5°	24.5	15.9	14.9	13.8	14.9
90°	1.4	6.4	10.0	12.8	13.7
92.5°	11.8	17.8	20.0	21.4	21.9
95°	27.3	31.4	34.6	36.0	36.0
97.5°	43.7	47.4	51.0	52.9	52.9
100°	63.8	65.6	69.7	70.6	70.6
102.5°	84.8	85.2	88.9	90.2	90.7
105°	106.2	106.6	108.4	109.8	111.2
107.5°	128.5	129.0	129.4	131.2	130.8
110°	151.3	152.2	151.7	150.8	152.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	175.0	175.0	174.1	174.1	174.1
115°	198.7	198.7	197.8	197.3	196.8
117.5°	221.0	221.0	220.5	219.2	217.8
120°	243.3	245.1	243.8	241.5	242.4
122.5°	266.6	267.0	266.6	265.2	262.9
125°	289.3	289.3	288.9	288.0	287.1
127.5°	309.9	311.2	310.3	309.4	308.9
130°	331.7	333.1	333.1	332.2	330.4
132.5°	354.1	355.0	354.5	353.6	353.1
135°	373.2	375.9	375.9	375.0	373.6
137.5°	394.6	396.0	396.9	395.5	396.0
140°	416.0	416.9	416.9	416.5	416.0
142.5°	435.6	436.5	436.1	436.1	436.1
145°	453.4	455.2	455.7	455.2	453.8
147.5°	471.6	473.9	473.4	473.0	472.5
150°	488.0	489.8	489.8	489.8	489.4
152.5°	503.5	504.4	504.9	506.2	504.9
155°	519.5	519.5	519.0	520.8	519.0
157.5°	533.1	532.2	532.2	533.6	532.2
160°	545.0	544.5	544.1	545.4	543.2
162.5°	555.9	554.5	554.1	556.8	554.5
165°	565.5	564.1	563.2	565.9	564.1
167.5°	573.2	571.4	571.4	574.1	571.4
170°	579.6	577.3	577.8	580.5	577.3
172.5°	584.2	582.3	582.3	585.5	582.3
175°	588.3	586.0	585.5	588.7	585.5
177.5°	590.1	587.8	587.8	591.0	587.4
180°	589.2	589.2	589.2	589.2	589.2

(END OF REPORT)