

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: P1032823

Luminaire Tested: S124DIW-B795D470UB2750-4F0-XX-W2A-F_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032823
REPORT IS A COMBINATION OF REPORTS P998166 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D470UB2750-4F0-XX-W2A-F_5000K
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

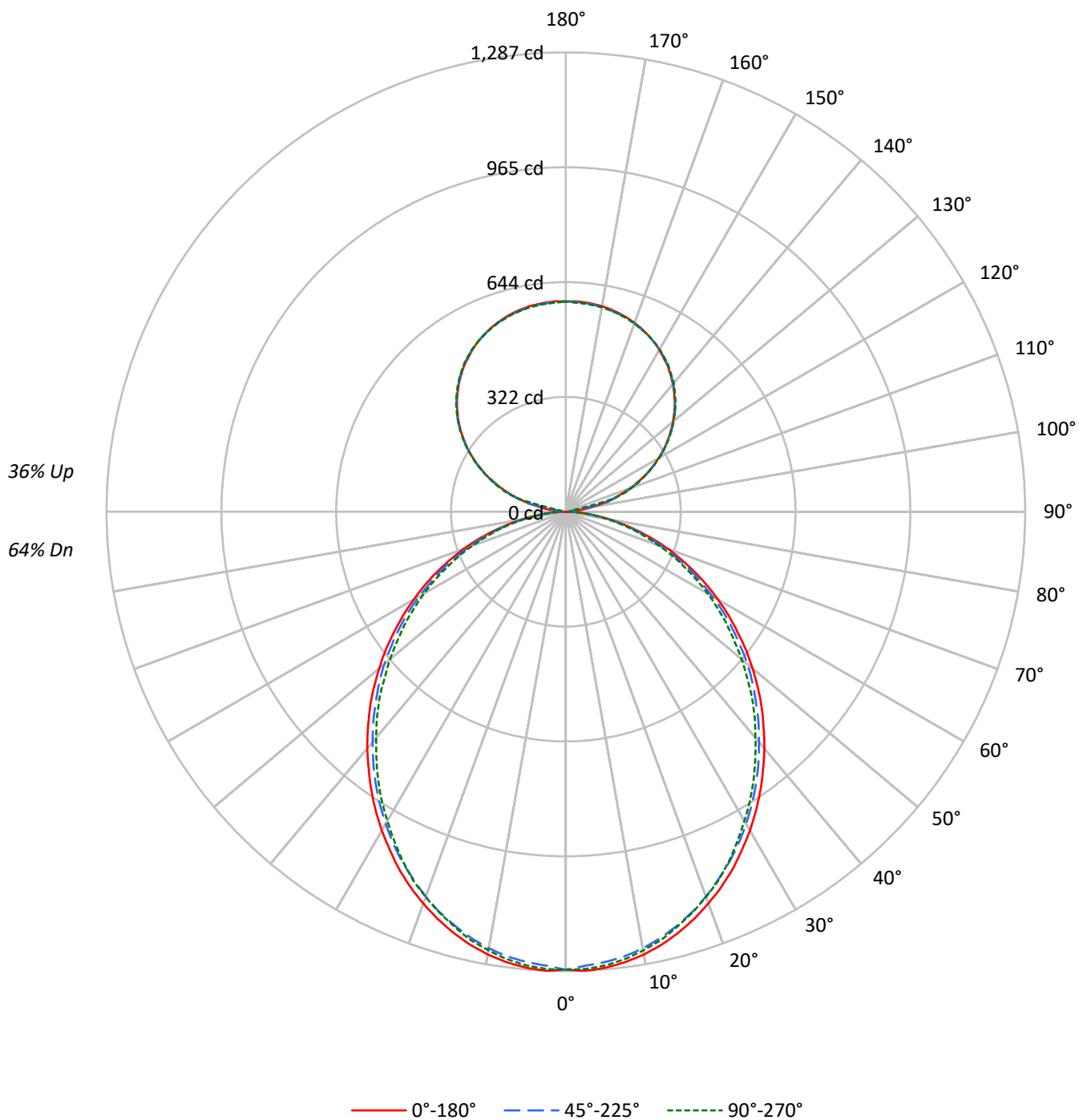
Lumens per Lamp: N/A
Luminaire Lumens: 5117.0 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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: P1032823

CATALOG NUMBER: S124DIW-B795D470UB2750-4F0-XX-W2A-F_5000K

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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	64		
1	101	97	93	89	95	91	87	84	80	77	75	70	68	67	61	60	59	54		
2	92	84	78	73	86	79	74	69	70	66	62	62	58	56	54	51	49	45		
3	84	74	67	61	78	70	63	58	62	57	52	55	50	47	48	45	42	38		
4	77	66	58	51	72	62	55	49	55	49	45	49	44	40	43	39	36	33		
5	71	59	50	44	66	55	48	42	49	43	39	44	39	35	38	35	32	29		
6	65	53	44	38	61	50	42	37	45	38	34	40	35	31	35	31	28	25		
7	60	48	39	34	56	45	38	32	40	34	30	36	31	27	32	28	25	22		
8	56	43	35	30	53	41	34	29	37	31	27	33	28	24	29	25	22	20		
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	27	23	20	18		
10	49	36	29	24	46	35	28	23	31	26	22	28	23	20	25	21	18	16		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10462	10462	10462
5°	10470	10161	10174
10°	10382	9879	9810
15°	10233	9543	9399
20°	10043	9181	8975
25°	9829	8797	8518
30°	9571	8383	8016
35°	9303	7958	7531
40°	9025	7503	7014
45°	8733	7044	6532
50°	8409	6600	5998
55°	8058	6082	5467
60°	7697	5514	4915
65°	7285	4927	4292
70°	6811	4222	3625
75°	6104	3403	2904
80°	5199	2460	2042
85°	4039	1371	1098

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8733 cd/sqm

TEST NUMBER: P1032823

CATALOG NUMBER: S124DIW-B795D470UB2750-4F0-XX-W2A-F_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.9	2.4
10°-20°	340.7	6.7
20°-30°	501.4	9.8
30°-40°	582.8	11.4
40°-50°	582.8	11.4
50°-60°	509.7	10.0
60°-70°	378.4	7.4
70°-80°	214.7	4.2
80°-90°	62.7	1.2
90°-100°	19.6	0.4
100°-110°	128.8	2.5
110°-120°	245.9	4.8
120°-130°	312.2	6.1
130°-140°	333.9	6.5
140°-150°	312.3	6.1
150°-160°	251.8	4.9
160°-170°	162.4	3.2
170°-180°	56.0	1.1
0°-30°	963.0	18.8
0°-40°	1545.9	30.2
0°-60°	2638.4	51.6
0°-90°	3294.2	64.4
90°-120°	394.2	7.7
90°-150°	1352.6	26.4
90°-180°	1823.0	35.6
0°-180°	5117.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1283	1283	1283	1283	1283	
5°	1282	1278	1266	1278	1276	122
15°	1220	1216	1201	1207	1204	344
25°	1105	1098	1084	1085	1080	509
35°	951	944	929	922	917	595
45°	776	769	752	741	738	598
55°	587	584	570	557	551	526
65°	398	393	382	372	367	394
75°	212	207	202	197	196	225
85°	56	56	54	54	52	60
90°	1	6	10	12	13	5
95°	24	9	10	12	13	30
105°	133	135	138	141	126	139
115°	248	249	248	249	249	244
125°	348	350	349	350	351	311
135°	432	431	433	434	435	333
145°	498	499	499	500	500	311
155°	546	546	545	547	545	252
165°	576	574	574	577	573	163
175°	589	586	587	591	586	56
180°	589	589	589	589	589	

TEST NUMBER: P1032823

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1283.0	1283.0	1283.0	1283.0	1283.0
2.5°	1287.1	1284.0	1272.7	1283.0	1281.9
5°	1281.9	1277.8	1266.5	1277.8	1275.8
7.5°	1272.7	1268.6	1256.2	1265.5	1264.5
10°	1259.3	1255.2	1241.9	1250.1	1248.0
12.5°	1241.9	1237.7	1223.3	1232.6	1229.5
15°	1220.3	1216.2	1200.7	1206.9	1203.8
17.5°	1195.6	1190.5	1176.1	1180.2	1178.1
20°	1167.8	1162.7	1147.3	1150.4	1148.3
22.5°	1138.0	1130.8	1115.4	1121.6	1117.5
25°	1105.1	1097.9	1083.5	1084.6	1080.5
27.5°	1068.1	1060.9	1047.6	1045.5	1040.4
30°	1031.1	1022.9	1009.5	1005.4	1000.3
32.5°	992.0	984.8	970.5	965.3	960.2
35°	950.9	943.7	929.3	922.1	917.0
37.5°	907.7	901.6	886.2	879.0	871.8
40°	865.6	857.4	842.0	831.7	826.5
42.5°	820.4	816.3	798.8	786.4	783.4
45°	776.2	769.0	752.5	741.2	738.1
47.5°	729.9	724.8	709.3	697.0	688.8
50°	682.6	678.5	664.1	649.7	643.5
52.5°	636.3	631.2	615.8	603.4	595.2
55°	587.0	583.9	569.5	557.2	551.0
57.5°	540.7	537.7	523.3	510.9	504.8
60°	492.4	487.3	473.9	464.7	459.5
62.5°	445.1	441.0	426.6	418.4	413.3
65°	397.8	392.7	382.4	372.1	367.0
67.5°	349.5	345.4	335.1	324.9	323.8
70°	305.3	298.1	289.9	281.7	278.6
72.5°	258.0	250.8	244.7	238.5	235.4
75°	211.8	206.6	201.5	197.4	196.4
77.5°	166.5	164.5	159.3	158.3	155.2
80°	126.4	123.4	121.3	119.3	118.2
82.5°	87.4	86.4	86.4	85.3	84.3
85°	55.5	55.5	53.5	53.5	52.4
87.5°	26.7	25.7	24.7	24.7	24.7
90°	1.3	6.2	9.7	12.3	13.2
92.5°	6.6	5.7	9.3	11.9	11.9
95°	24.2	9.3	9.7	12.3	12.8
97.5°	46.3	56.0	9.7	11.9	12.3
100°	72.3	80.2	19.4	11.9	12.3
102.5°	101.3	106.6	111.9	12.8	12.8
105°	132.6	135.3	137.5	141.4	125.6
107.5°	161.3	162.6	165.7	167.9	169.6
110°	190.3	191.7	194.3	195.2	196.5

TEST NUMBER: P1032823

CATALOG NUMBER: S124DIW-B795D470UB2750-4F0-XX-W2A-F_5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	218.5	221.2	222.1	221.6	223.4
115°	247.6	248.9	248.5	249.4	249.4
117.5°	273.6	275.4	276.7	276.2	276.2
120°	300.0	301.8	301.4	302.2	301.4
122.5°	324.7	325.6	326.5	326.9	326.0
125°	348.1	349.8	348.9	350.3	350.7
127.5°	370.5	371.0	373.2	372.7	372.3
130°	392.1	392.6	393.9	394.3	394.3
132.5°	412.0	412.8	414.6	415.0	414.6
135°	431.8	431.3	433.1	434.0	434.9
137.5°	449.4	449.4	451.6	452.5	452.0
140°	466.6	467.5	468.3	469.7	470.1
142.5°	482.0	483.8	484.2	485.1	485.1
145°	497.9	499.2	499.2	499.6	500.5
147.5°	510.2	512.8	512.4	512.8	513.3
150°	523.9	525.6	525.2	525.2	525.6
152.5°	535.3	536.6	535.8	536.6	536.2
155°	545.9	546.3	545.0	546.8	545.4
157.5°	555.1	555.1	553.4	555.6	553.4
160°	563.1	561.8	561.3	564.0	561.3
162.5°	570.1	568.4	567.9	570.6	567.5
165°	575.9	573.6	573.6	577.2	573.2
167.5°	580.7	578.5	578.1	582.0	577.6
170°	584.7	582.0	582.5	586.0	581.6
172.5°	587.3	584.7	585.1	588.6	583.8
175°	589.1	586.4	586.9	590.8	585.5
177.5°	590.4	587.3	588.2	591.7	586.4
180°	589.1	589.1	589.1	589.1	589.1

(END OF REPORT)