

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: P1032816

Luminaire Tested: S124DIW-B795D470UB2750-4F0-XX-W2A-D_3000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032816
REPORT IS A COMBINATION OF REPORTS P998156 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-D_3000K
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

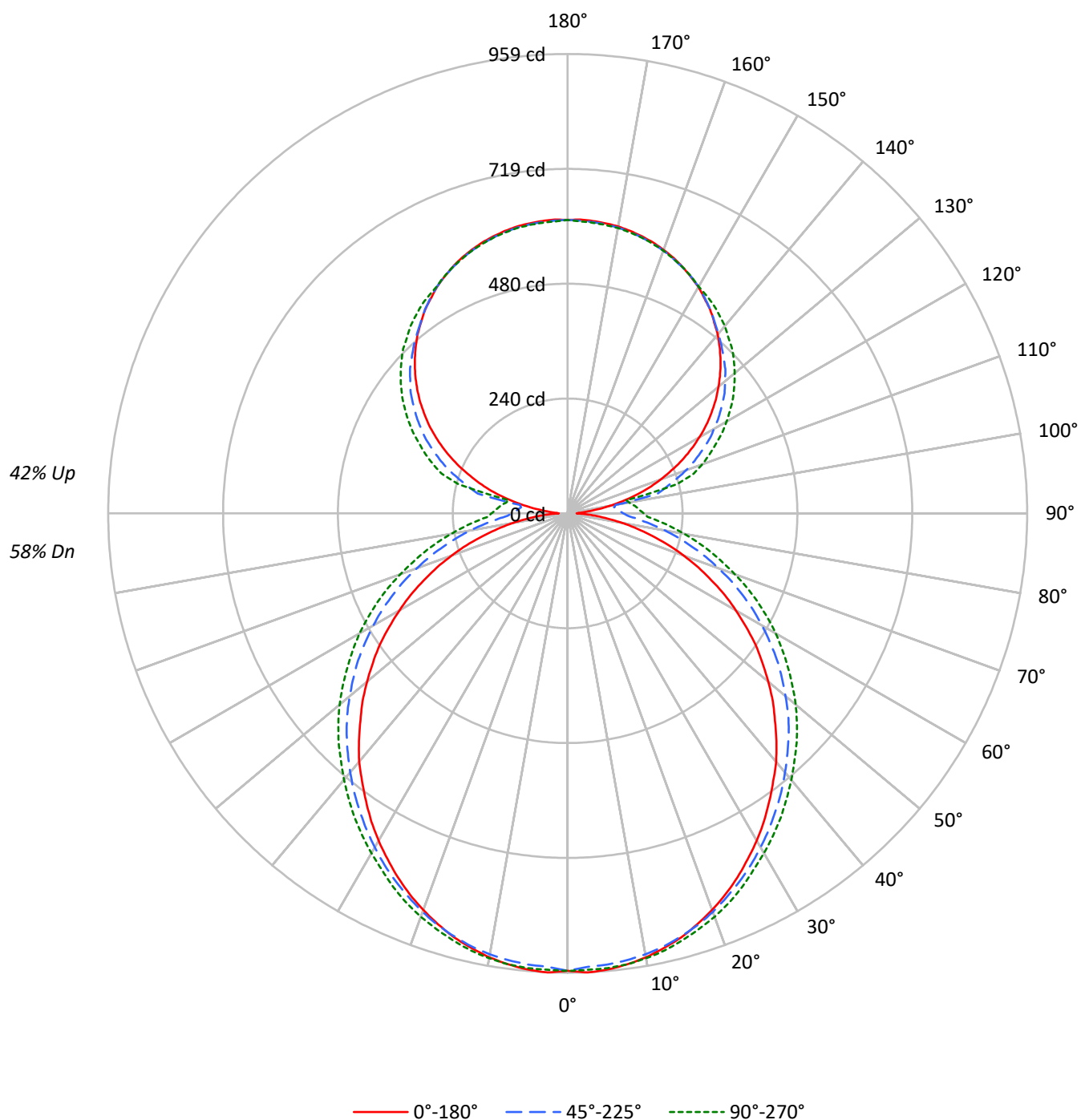
Lumens per Lamp: N/A
Luminaire Lumens: 5153.0 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	64	64	64
1	99	94	89	85	92	87	83	80	75	73	70	65	62	60	55	53	52
2	89	81	74	69	83	76	70	65	65	61	57	56	53	50	47	45	43
3	81	71	63	57	75	66	59	53	57	52	47	49	45	41	42	38	36
4	74	62	54	48	69	58	51	45	51	45	40	44	39	35	37	33	30
5	68	56	47	41	63	52	44	38	45	39	34	39	34	30	33	29	26
6	62	50	41	35	58	47	39	33	41	34	30	35	30	26	30	26	23
7	58	45	36	31	54	42	34	29	37	31	26	32	27	23	27	23	20
8	54	41	33	27	50	38	31	26	34	27	23	29	24	21	25	21	18
9	50	37	29	24	46	35	28	23	31	25	21	27	22	18	23	19	16
10	47	34	27	22	43	32	25	21	28	23	19	25	20	17	21	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7788	7788	7788
5°	7809	7585	7599
10°	7758	7435	7414
15°	7686	7268	7206
20°	7578	7086	7005
25°	7457	6886	6787
30°	7325	6687	6565
35°	7177	6485	6367
40°	7059	6289	6162
45°	6882	6107	5982
50°	6732	5899	5791
55°	6577	5698	5572
60°	6336	5450	5365
65°	6071	5181	5115
70°	5749	4874	4828
75°	5300	4533	4554
80°	4796	4186	4267
85°	4126	3836	4035

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6882 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.5	1.8
10°-20°	259.3	5.0
20°-30°	392.0	7.6
30°-40°	474.3	9.2
40°-50°	501.4	9.7
50°-60°	471.9	9.2
60°-70°	391.5	7.6
70°-80°	274.8	5.3
80°-90°	156.2	3.0
90°-100°	112.6	2.2
100°-110°	202.2	3.9
110°-120°	301.6	5.9
120°-130°	350.5	6.8
130°-140°	358.5	7.0
140°-150°	327.0	6.3
150°-160°	261.9	5.1
160°-170°	168.9	3.3
170°-180°	58.2	1.1
0°-30°	741.8	14.4
0°-40°	1216.0	23.6
0°-60°	2189.2	42.5
0°-90°	3011.7	58.4
90°-120°	616.4	12.0
90°-150°	1652.3	32.1
90°-180°	2141.0	41.5
0°-180°	5153.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	955	955	955	955	955	
5°	956	953	945	954	953	91
15°	916	918	914	924	923	258
25°	838	845	848	860	861	386
35°	734	746	757	772	775	459
45°	612	632	652	670	676	473
55°	479	502	534	555	562	427
65°	332	366	402	429	437	329
75°	184	224	268	298	308	195
85°	57	102	150	182	192	59
90°	18	66	116	150	159	13
95°	39	59	103	135	145	42
105°	148	172	214	244	236	155
115°	264	275	309	333	341	260
125°	366	367	393	415	421	327
135°	451	451	460	478	486	348
145°	519	519	519	526	531	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°	955.0	955.0	955.0	955.0	955.0
2.5°	959.3	956.1	947.5	955.0	953.9
5°	956.1	952.9	945.4	953.9	952.9
7.5°	949.7	947.5	941.1	950.7	949.7
10°	941.1	940.0	934.7	944.3	943.2
12.5°	929.3	929.3	926.1	934.7	934.7
15°	916.5	917.6	914.4	924.0	922.9
17.5°	899.4	902.6	901.5	911.2	910.1
20°	881.2	884.4	885.5	896.2	896.2
22.5°	860.9	865.2	867.3	878.0	880.1
25°	838.4	844.9	848.1	859.8	860.9
27.5°	813.8	823.5	827.7	838.4	839.5
30°	789.2	797.8	805.3	817.0	819.2
32.5°	762.5	773.2	781.8	795.7	797.8
35°	733.6	746.5	757.2	772.1	775.3
37.5°	704.8	719.7	732.6	747.5	750.7
40°	677.0	690.9	705.8	721.9	726.1
42.5°	644.9	660.9	679.1	697.3	700.5
45°	611.7	632.0	652.4	670.5	675.9
47.5°	580.7	601.0	624.5	642.7	649.1
50°	546.5	570.0	593.5	614.9	621.3
52.5°	512.3	535.8	563.6	585.0	591.4
55°	479.1	501.6	533.6	555.0	561.5
57.5°	441.7	469.5	500.5	526.2	531.5
60°	405.3	433.1	468.4	493.0	501.6
62.5°	370.0	401.0	436.3	460.9	469.5
65°	331.5	365.7	402.1	428.8	437.4
67.5°	295.2	331.5	370.0	396.8	405.3
70°	257.7	294.1	334.7	363.6	371.1
72.5°	221.4	258.8	302.6	330.5	339.0
75°	183.9	223.5	268.4	298.4	308.0
77.5°	148.7	190.4	237.4	267.4	278.1
80°	116.6	159.3	206.4	238.5	247.0
82.5°	84.5	129.4	176.5	209.6	219.2
85°	56.7	101.6	149.7	181.8	192.5
87.5°	35.3	79.1	126.2	157.2	166.8
90°	18.5	66.3	116.0	149.7	159.1
92.5°	22.9	59.5	109.1	141.8	150.4
95°	39.1	58.8	103.1	134.7	144.8
97.5°	60.9	102.0	97.8	127.9	137.9
100°	86.9	123.0	101.5	122.6	130.4
102.5°	117.2	146.2	192.3	117.0	125.6
105°	147.5	171.7	213.6	244.4	236.5
107.5°	177.3	196.9	237.5	266.6	275.9
110°	206.6	222.8	263.1	288.6	298.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	234.8	250.3	286.5	309.6	320.0
115°	263.9	274.9	308.7	333.2	340.7
117.5°	291.0	299.2	332.7	354.7	363.2
120°	317.3	322.5	353.0	375.3	382.9
122.5°	343.0	343.9	373.7	395.6	402.2
125°	366.3	367.0	392.8	414.6	421.4
127.5°	389.7	389.0	412.7	431.5	438.5
130°	411.0	410.4	428.9	448.6	455.0
132.5°	431.6	431.5	446.2	464.8	470.8
135°	451.2	450.7	460.0	478.0	485.5
137.5°	469.5	468.5	475.0	492.0	496.8
140°	487.4	487.3	489.2	504.5	510.3
142.5°	502.4	504.2	503.6	516.3	520.5
145°	518.9	519.2	519.2	526.0	531.2
147.5°	531.7	533.4	532.9	534.5	539.1
150°	545.9	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)