

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: P1033773

Luminaire Tested: S124DIW-B795D470UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033773
REPORT IS A COMBINATION OF REPORTS P998171 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D470UB30-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

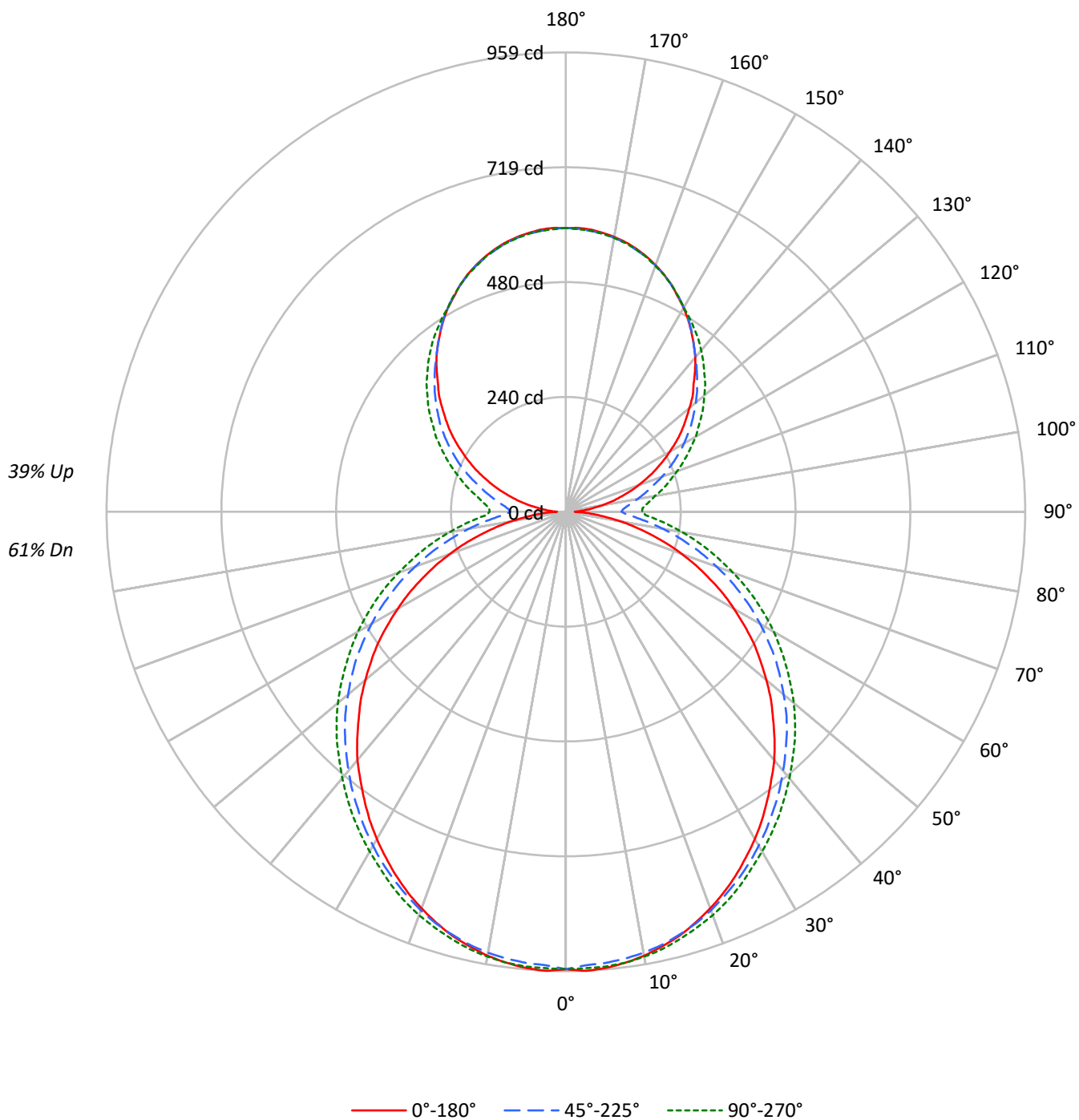
Lumens per Lamp: N/A
Luminaire Lumens: 4900.9 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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
RCR																	
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	99	94	90	86	92	88	84	81	77	74	71	67	64	62	57	55	54
2	90	82	75	69	84	76	70	65	67	62	58	58	54	51	49	47	44
3	82	71	63	57	76	67	60	54	58	53	48	51	46	43	43	40	37
4	74	63	54	48	69	59	51	45	52	46	41	45	40	36	38	35	32
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	35	31	27
6	63	50	41	35	58	47	39	34	41	35	30	36	31	27	31	27	24
7	58	45	37	31	54	42	35	29	37	31	27	33	28	24	28	24	21
8	54	41	33	27	50	39	31	26	34	28	24	30	25	21	26	22	19
9	50	37	30	24	47	35	28	23	31	25	21	28	23	19	24	20	17
10	47	34	27	22	44	32	25	21	29	23	19	25	21	17	22	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	5.3
20°-30°	392.0	8.0
30°-40°	474.3	9.7
40°-50°	501.4	10.2
50°-60°	471.9	9.6
60°-70°	391.5	8.0
70°-80°	274.8	5.6
80°-90°	156.2	3.2
90°-100°	130.8	2.7
100°-110°	184.0	3.8
110°-120°	242.3	4.9
120°-130°	284.9	5.8
130°-140°	302.2	6.2
140°-150°	288.3	5.9
150°-160°	240.6	4.9
160°-170°	160.1	3.3
170°-180°	56.1	1.1
0°-30°	741.8	15.1
0°-40°	1216.0	24.8
0°-60°	2189.2	44.7
0°-90°	3011.7	61.5
90°-120°	557.1	11.4
90°-150°	1432.5	29.2
90°-180°	1889.0	38.5
0°-180°	4900.9	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	14
95°	41	81	128	158	168	41
105°	116	138	180	208	218	124
115°	206	216	249	272	279	204
125°	295	294	320	340	345	263
135°	377	380	388	404	409	292
145°	457	458	458	464	467	286
155°	522	522	522	524	522	240
165°	569	567	566	569	567	160
175°	592	589	589	592	589	56
180°	592	592	592	592	592	

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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°	27.9	71.4	119.7	150.9	160.0
95°	41.4	80.8	127.8	158.1	167.7
97.5°	56.8	91.4	139.0	168.6	178.2
100°	75.9	105.6	151.4	181.2	188.6
102.5°	97.0	121.0	165.2	194.4	203.5
105°	116.4	138.2	179.6	207.7	217.7
107.5°	138.8	157.5	195.3	224.0	231.0
110°	160.7	176.5	213.6	237.3	247.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	183.4	196.2	230.6	254.1	262.7
115°	206.2	215.8	249.1	272.2	279.2
117.5°	228.6	235.0	266.7	287.8	294.9
120°	250.0	255.1	284.7	303.8	313.2
122.5°	273.3	273.8	302.2	322.3	327.5
125°	295.2	294.1	320.4	339.9	345.3
127.5°	315.9	316.1	336.6	354.9	361.9
130°	336.7	337.0	354.1	372.5	377.1
132.5°	359.2	359.0	371.5	388.7	394.7
135°	377.3	380.1	387.6	403.8	408.9
137.5°	398.9	399.3	404.4	419.1	424.9
140°	420.4	420.3	421.3	434.8	439.7
142.5°	439.1	440.0	438.5	450.3	454.5
145°	457.0	457.7	458.2	464.1	467.0
147.5°	475.3	476.5	476.0	476.7	480.4
150°	491.8	492.5	492.5	492.5	492.1
152.5°	506.3	507.2	507.7	509.0	507.7
155°	522.3	522.3	521.9	523.7	521.9
157.5°	536.1	535.1	535.1	536.5	535.1
160°	548.0	547.5	547.1	548.4	546.1
162.5°	559.0	557.6	557.1	559.9	557.6
165°	568.6	567.2	566.3	569.0	567.2
167.5°	576.4	574.5	574.5	577.3	574.5
170°	582.8	580.5	581.0	583.7	580.5
172.5°	587.4	585.5	585.5	588.7	585.5
175°	591.5	589.2	588.7	592.0	588.7
177.5°	593.3	591.0	591.0	594.2	590.6
180°	592.4	592.4	592.4	592.4	592.4

(END OF REPORT)