

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: P1031694

Luminaire Tested: S123DIW-B340D755UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031694
REPORT IS A COMBINATION OF REPORTS P991506 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D755UB50-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

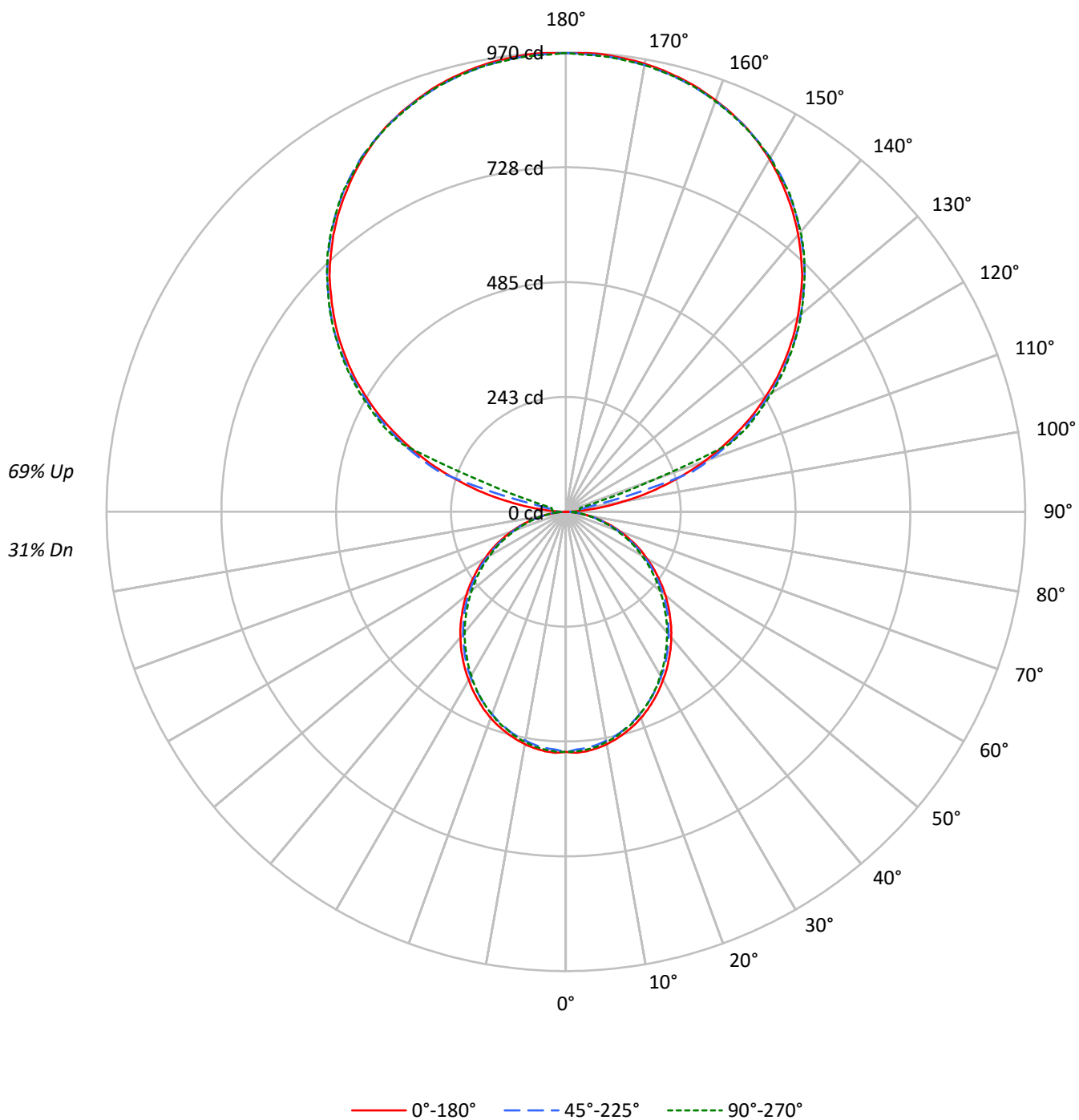
Lumens per Lamp: N/A
Luminaire Lumens: 4275.0 lumens
Efficiency: N/A
Efficacy: 118.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 36.2
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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39
1	93	89	85	82	84	80	77	74	64	61	59	48	47	46	34	33	32
2	85	78	72	67	76	70	65	61	56	52	49	42	40	38	30	29	27
3	78	68	61	56	69	62	56	51	49	45	41	37	34	32	26	25	23
4	71	60	53	47	63	55	48	43	43	39	35	33	30	27	24	22	20
5	65	54	46	40	58	49	42	37	39	34	30	30	26	24	21	19	17
6	60	48	40	35	53	43	37	32	35	30	26	27	23	21	19	17	15
7	55	43	35	30	49	39	32	28	31	26	23	24	21	18	18	15	13
8	51	39	32	26	46	35	29	24	29	24	20	22	19	16	16	14	12
9	47	36	28	23	43	32	26	22	26	21	18	20	17	14	15	13	11
10	44	33	26	21	40	30	23	19	24	19	16	19	15	13	14	11	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5459	5459	5459
5°	5473	5271	5263
10°	5425	5092	5041
15°	5349	4907	4798
20°	5263	4701	4557
25°	5150	4483	4300
30°	5028	4259	4029
35°	4900	4029	3760
40°	4766	3787	3496
45°	4617	3552	3220
50°	4467	3291	2943
55°	4274	3017	2662
60°	4077	2717	2363
65°	3890	2391	2051
70°	3622	2029	1687
75°	3233	1607	1310
80°	2796	1130	925
85°	2180	607	463

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4617 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.8	1.1
10°-20°	135.0	3.2
20°-30°	199.4	4.7
30°-40°	232.9	5.4
40°-50°	234.1	5.5
50°-60°	205.7	4.8
60°-70°	153.2	3.6
70°-80°	87.2	2.0
80°-90°	26.7	0.6
90°-100°	34.1	0.8
100°-110°	165.2	3.9
110°-120°	404.7	9.5
120°-130°	513.8	12.0
130°-140°	548.9	12.8
140°-150°	513.2	12.0
150°-160°	414.0	9.7
160°-170°	267.2	6.2
170°-180°	92.1	2.2
0°-30°	382.2	8.9
0°-40°	615.1	14.4
0°-60°	1054.9	24.7
0°-90°	1321.9	30.9
90°-120°	604.0	14.1
90°-150°	2179.9	51.0
90°-180°	2953.0	69.1
0°-180°	4275.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	507	507	507	507	507	
5°	508	505	501	505	504	48
15°	483	482	476	479	477	136
25°	439	436	430	431	430	202
35°	379	377	371	368	366	237
45°	311	309	304	298	296	240
55°	236	236	230	225	223	211
65°	161	159	154	151	150	159
75°	85	83	82	80	78	91
85°	23	22	22	21	21	24
90°	1	8	17	20	22	4
95°	44	14	22	27	27	52
105°	214	222	158	30	32	227
115°	402	407	413	420	423	397
125°	567	573	576	577	579	507
135°	706	710	713	715	713	544
145°	815	820	821	823	823	510
155°	897	896	897	900	896	414
165°	946	944	944	949	944	267
175°	969	965	966	971	965	92
180°	969	969	969	969	969	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	507.2	507.2	507.2	507.2	507.2
2.5°	509.4	507.6	502.8	507.2	506.8
5°	507.6	505.4	500.7	505.0	504.1
7.5°	503.7	501.5	496.7	500.7	500.2
10°	498.5	496.3	490.6	494.5	493.7
12.5°	491.5	489.7	484.5	487.1	486.7
15°	483.2	481.5	475.8	479.3	476.7
17.5°	474.0	471.9	466.2	468.8	467.9
20°	463.6	461.0	455.3	457.0	455.7
22.5°	451.8	449.2	443.5	444.8	443.1
25°	438.7	436.1	430.4	430.9	429.6
27.5°	425.2	422.6	416.5	416.9	415.6
30°	410.4	408.2	402.1	402.1	399.0
32.5°	395.5	392.5	388.1	385.1	383.8
35°	379.4	376.8	371.1	368.5	366.3
37.5°	363.3	359.8	354.1	351.1	349.8
40°	346.3	343.7	337.5	334.1	332.3
42.5°	329.3	326.2	320.1	316.6	314.9
45°	310.9	309.2	303.5	298.3	296.1
47.5°	293.1	290.4	285.2	280.0	278.2
50°	274.7	272.6	266.9	262.1	259.5
52.5°	255.6	254.3	248.1	244.2	241.6
55°	235.9	235.5	229.8	225.0	222.9
57.5°	217.6	215.9	211.5	207.2	204.5
60°	197.6	197.1	191.9	188.0	185.8
62.5°	179.7	178.4	173.1	169.2	167.9
65°	160.9	158.7	154.4	150.9	149.6
67.5°	140.9	139.1	135.6	132.6	130.8
70°	123.0	120.4	117.7	114.7	112.5
72.5°	104.2	102.5	99.4	96.8	95.9
75°	85.0	83.3	82.0	79.8	78.5
77.5°	68.0	67.2	65.4	63.7	63.7
80°	51.5	50.2	49.3	48.8	48.8
82.5°	35.3	35.3	35.3	34.5	34.0
85°	22.7	21.8	21.8	20.9	20.9
87.5°	11.3	10.0	9.6	9.2	9.2
90°	0.7	7.9	17.3	20.2	21.6
92.5°	16.6	12.2	18.7	23.7	24.5
95°	43.9	14.4	22.3	27.3	27.3
97.5°	79.9	59.7	23.0	28.8	29.5
100°	121.6	136.0	23.7	29.5	30.2
102.5°	169.1	178.5	53.3	29.5	30.9
105°	214.5	222.4	157.6	30.2	31.7
107.5°	262.7	269.2	279.9	169.1	74.8
110°	310.9	316.7	324.6	300.8	197.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	357.0	362.0	369.9	376.4	374.9
115°	402.3	406.6	413.1	420.3	423.2
117.5°	446.9	451.9	455.5	461.3	462.0
120°	487.9	494.4	496.6	502.3	502.3
122.5°	529.7	534.7	537.6	541.2	541.9
125°	567.1	572.9	575.7	577.2	578.6
127.5°	604.5	610.3	613.9	616.0	614.6
130°	639.1	644.8	647.7	650.6	649.1
132.5°	672.2	677.9	680.1	683.0	680.8
135°	706.0	710.3	713.2	715.3	713.2
137.5°	734.8	740.5	742.0	745.6	744.1
140°	763.6	767.9	770.0	772.9	771.5
142.5°	790.2	794.5	796.7	798.8	796.7
145°	814.7	819.7	821.1	822.6	822.6
147.5°	838.4	842.0	843.4	844.9	841.3
150°	860.0	862.2	863.6	865.0	862.9
152.5°	879.4	880.1	880.9	883.7	880.1
155°	897.4	896.0	896.7	900.3	896.0
157.5°	911.8	911.8	911.1	915.4	909.7
160°	924.8	924.0	923.3	927.6	922.6
162.5°	937.0	934.8	934.1	939.2	934.8
165°	946.4	944.2	943.5	949.2	944.2
167.5°	954.3	951.4	951.4	957.2	951.4
170°	960.8	957.9	957.9	963.6	957.9
172.5°	965.1	961.5	962.2	967.9	961.5
175°	968.7	965.1	965.8	970.8	965.1
177.5°	970.1	966.5	967.2	973.0	965.8
180°	968.7	968.7	968.7	968.7	968.7

(END OF REPORT)