

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: P1031825

Luminaire Tested: S123DIW-B560D755UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031825
REPORT IS A COMBINATION OF REPORTS P991816 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D755UB35-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

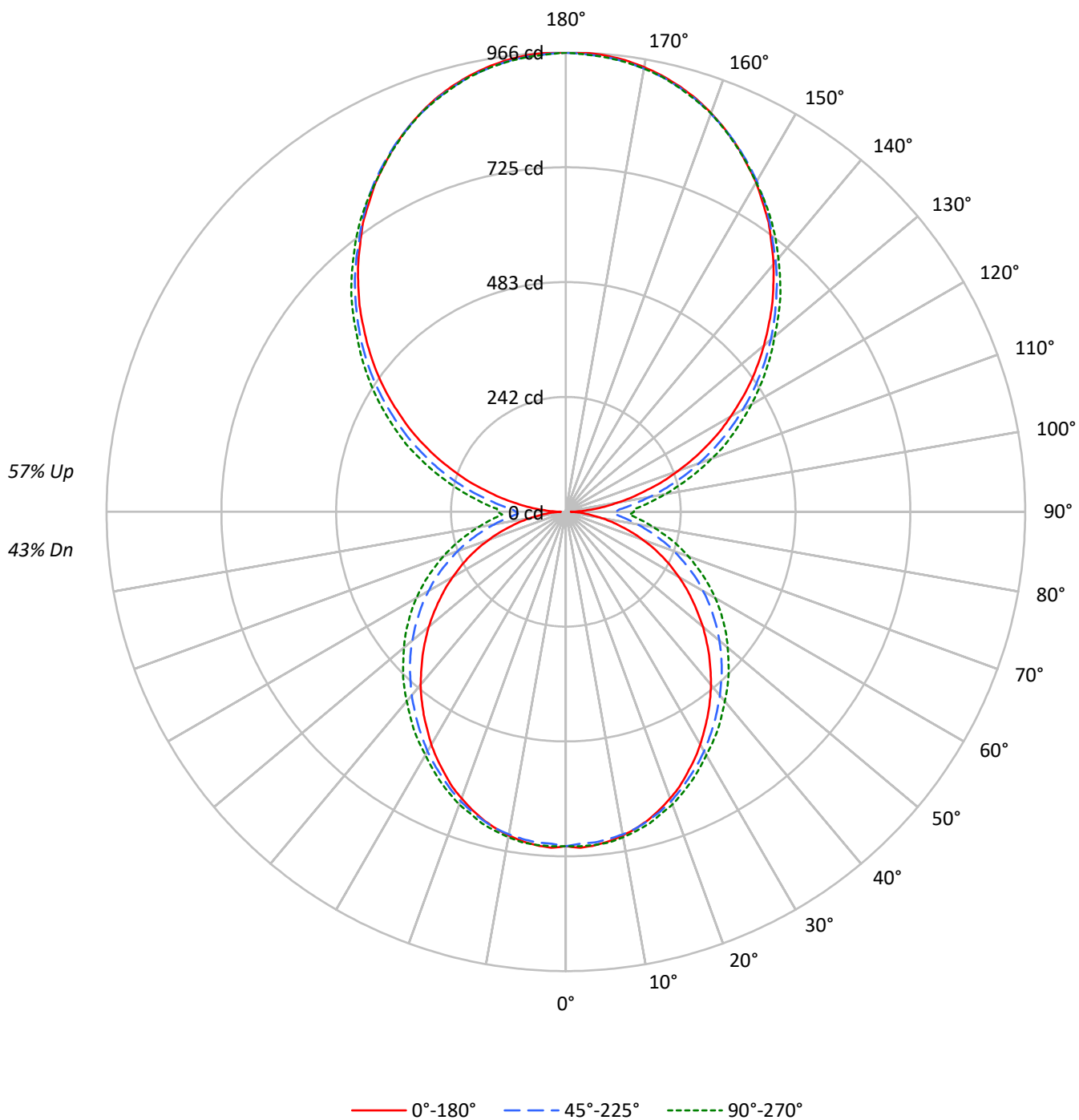
Lumens per Lamp: N/A
Luminaire Lumens: 5041.0 lumens
Efficiency: N/A
Efficacy: 106.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 47.2
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50
1	95	91	86	83	87	83	79	76	68	66	63	55	53	51	42	41	40
2	86	79	72	67	79	72	66	62	59	55	52	48	45	42	37	35	33
3	79	69	61	55	71	63	56	51	52	47	43	42	38	35	32	30	28
4	72	61	53	46	65	56	48	43	46	41	36	37	33	30	29	26	24
5	66	54	46	39	60	49	42	37	41	35	31	33	29	26	26	23	20
6	60	48	40	34	55	44	37	32	37	31	27	30	26	22	23	20	18
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	21	18	16
8	52	39	31	26	47	36	29	24	30	25	21	25	21	17	19	16	14
9	48	36	28	23	44	33	26	22	28	22	19	23	19	16	18	15	13
10	45	33	25	21	41	30	24	19	25	20	17	21	17	14	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7571	7571	7571
5°	7592	7349	7343
10°	7521	7150	7096
15°	7422	6930	6833
20°	7280	6686	6550
25°	7106	6410	6259
30°	6929	6160	5965
35°	6728	5898	5726
40°	6539	5658	5474
45°	6327	5426	5266
50°	6117	5196	5039
55°	5887	4961	4832
60°	5660	4719	4619
65°	5427	4462	4371
70°	5077	4173	4113
75°	4633	3846	3847
80°	4121	3512	3546
85°	3602	3244	3329

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6327 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.7	1.3
10°-20°	190.2	3.8
20°-30°	284.5	5.6
30°-40°	339.6	6.7
40°-50°	355.4	7.0
50°-60°	333.5	6.6
60°-70°	278.5	5.5
70°-80°	199.2	4.0
80°-90°	120.5	2.4
90°-100°	136.6	2.7
100°-110°	242.8	4.8
110°-120°	356.7	7.1
120°-130°	442.1	8.8
130°-140°	482.9	9.6
140°-150°	467.5	9.3
150°-160°	391.9	7.8
160°-170°	260.9	5.2
170°-180°	91.4	1.8
0°-30°	541.4	10.7
0°-40°	881.0	17.5
0°-60°	1569.9	31.1
0°-90°	2168.1	43.0
90°-120°	736.2	14.6
90°-150°	2128.7	42.2
90°-180°	2873.0	57.0
0°-180°	5041.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	703	703	703	703	703	
5°	704	703	698	704	703	67
15°	670	673	672	680	679	189
25°	605	613	615	625	625	279
35°	521	533	543	555	558	326
45°	426	444	464	478	484	329
55°	325	350	378	398	405	291
65°	224	254	288	311	319	222
75°	122	158	196	221	231	130
85°	38	76	116	142	150	39
90°	11	56	105	134	143	10
95°	53	88	132	159	166	56
105°	177	197	236	258	266	189
115°	326	338	364	383	388	323
125°	474	476	497	510	512	423
135°	614	617	625	636	638	473
145°	743	744	746	752	752	464
155°	850	850	851	854	849	391
165°	926	924	924	928	923	261
175°	963	960	960	965	959	92
180°	965	965	965	965	965	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	703.4	703.4	703.4	703.4	703.4
2.5°	707.2	704.9	698.8	704.9	704.2
5°	704.2	702.6	698.0	704.2	703.4
7.5°	698.8	698.8	694.2	701.9	701.1
10°	691.1	692.7	688.8	696.5	695.0
12.5°	682.0	684.3	682.0	688.8	687.3
15°	670.5	672.8	672.0	679.7	678.9
17.5°	656.7	661.3	660.5	667.4	665.9
20°	641.3	645.9	647.5	654.4	655.1
22.5°	625.3	629.8	632.1	641.3	640.6
25°	605.3	613.0	615.3	625.3	625.3
27.5°	586.2	594.6	599.2	607.6	608.4
30°	565.5	575.4	581.6	590.8	590.8
32.5°	542.5	554.0	562.4	572.4	574.7
35°	521.0	533.3	543.3	554.8	557.8
37.5°	498.1	511.8	523.3	536.4	538.7
40°	475.1	488.9	504.2	517.2	520.3
42.5°	449.8	467.4	483.5	498.1	502.7
45°	426.0	444.4	463.6	478.1	484.3
47.5°	400.7	421.4	442.9	459.0	463.6
50°	376.2	397.7	421.4	439.1	444.4
52.5°	350.2	373.2	400.0	418.4	425.3
55°	324.9	350.2	377.8	398.4	404.6
57.5°	300.4	326.4	356.3	377.0	383.9
60°	274.3	301.9	333.3	354.8	363.2
62.5°	249.8	278.1	311.9	333.3	341.0
65°	224.5	254.4	288.1	311.1	318.8
67.5°	199.2	230.6	264.4	289.6	295.8
70°	172.4	205.4	242.1	266.7	274.3
72.5°	147.9	180.8	219.1	244.4	252.1
75°	121.8	157.8	196.2	221.4	230.6
77.5°	99.6	135.6	173.9	200.8	207.7
80°	75.9	113.4	153.2	179.3	187.0
82.5°	55.2	93.5	134.1	160.1	167.8
85°	37.5	75.9	116.5	142.5	150.2
87.5°	23.0	61.3	100.4	126.4	134.1
90°	10.8	55.8	104.8	133.8	143.1
92.5°	32.0	69.4	112.4	139.8	145.2
95°	53.1	88.4	132.0	158.8	166.5
97.5°	81.3	112.6	153.2	179.9	186.8
100°	110.0	139.1	178.2	202.7	211.8
102.5°	143.4	167.1	206.9	230.6	237.6
105°	176.7	196.6	236.5	257.9	266.3
107.5°	215.5	232.3	266.8	289.7	295.9
110°	251.1	266.4	298.5	321.5	326.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	289.0	300.4	329.5	352.5	359.4
115°	326.1	337.6	363.7	382.8	388.2
117.5°	364.8	371.7	396.2	414.6	418.5
120°	399.7	408.1	429.6	446.4	450.3
122.5°	436.9	441.4	463.7	478.2	481.4
125°	474.0	476.3	497.0	510.0	512.4
127.5°	508.9	512.6	530.3	541.1	543.4
130°	543.8	549.0	562.2	573.6	572.9
132.5°	577.9	583.9	593.9	603.9	605.5
135°	613.5	617.4	625.0	635.8	638.0
137.5°	646.1	649.2	656.8	665.3	666.8
140°	679.5	683.3	686.4	697.1	695.6
142.5°	710.6	713.6	715.1	724.4	724.4
145°	743.2	744.0	746.2	751.6	751.6
147.5°	770.5	773.5	775.8	778.1	776.7
150°	800.1	801.6	803.1	803.1	800.1
152.5°	824.3	826.6	827.4	828.9	825.1
155°	850.1	850.1	850.9	853.9	848.6
157.5°	872.1	871.4	872.1	875.2	870.6
160°	892.6	891.1	891.1	894.9	891.8
162.5°	910.8	908.5	909.3	913.1	907.8
165°	926.0	923.7	923.7	928.2	922.9
167.5°	938.9	935.8	936.6	941.1	936.6
170°	949.5	946.4	946.4	951.8	946.4
172.5°	957.8	954.8	954.8	959.3	954.0
175°	963.1	960.1	960.1	964.6	959.3
177.5°	966.2	963.1	963.1	967.7	962.4
180°	965.4	965.4	965.4	965.4	965.4

(END OF REPORT)