

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: P1031815

Luminaire Tested: S123DIW-B560D755UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031815
REPORT IS A COMBINATION OF REPORTS P991780 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D755UB27-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

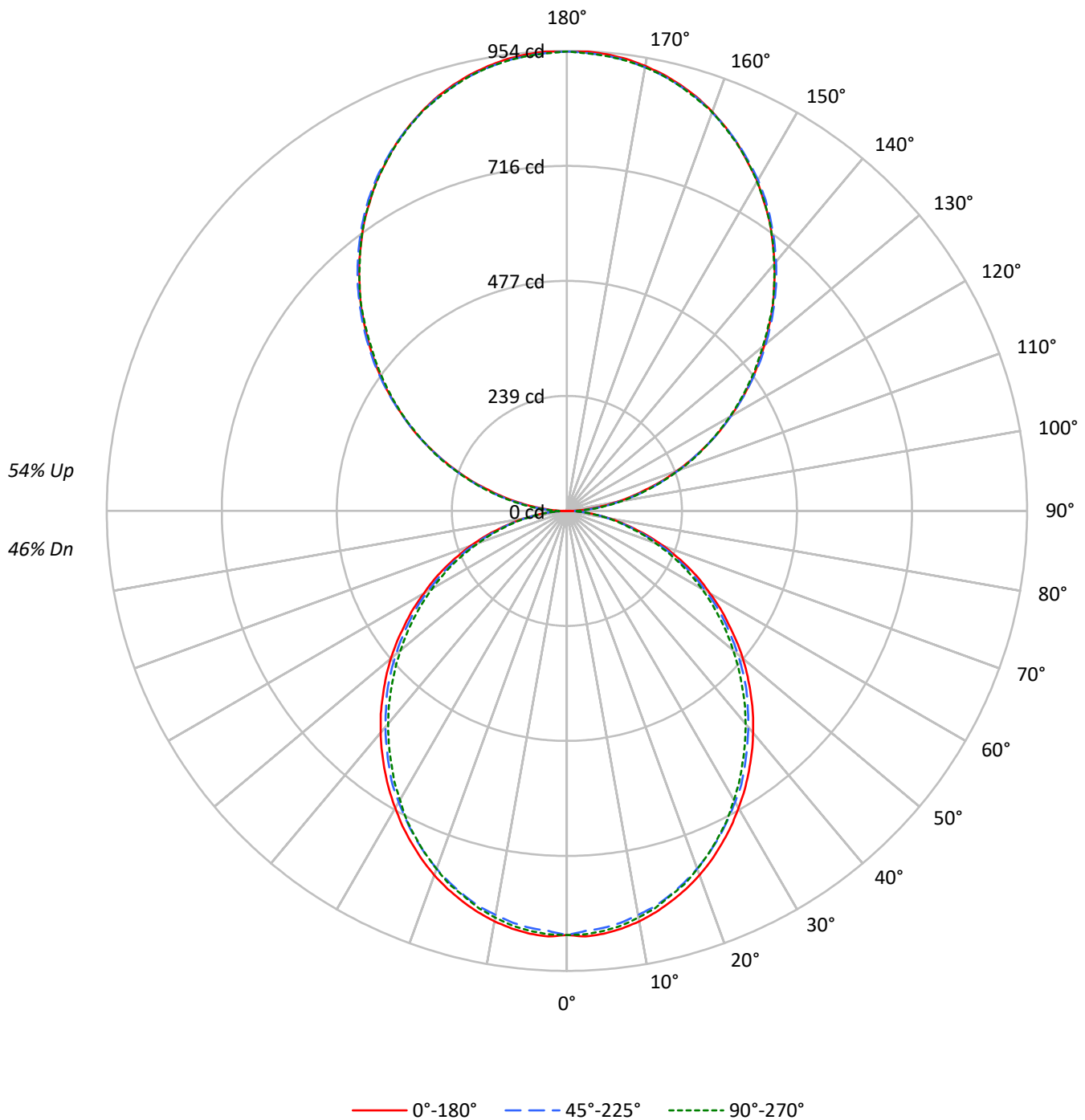
Lumens per Lamp: N/A
Luminaire Lumens: 4931.0 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	106	106	106	106	98	98	98	98	81	81	81	67	67	67	53	53	53
1	97	93	89	85	89	85	82	79	71	69	67	58	57	55	47	46	45
2	88	81	75	70	81	74	69	65	62	58	55	51	49	46	41	39	37
3	80	71	64	58	74	65	59	54	55	50	46	45	42	39	36	34	32
4	74	63	55	49	67	58	51	46	49	44	39	40	36	33	32	30	27
5	68	56	48	42	62	52	45	39	44	38	34	36	32	29	29	26	24
6	62	50	42	36	57	46	39	34	39	34	30	33	28	25	26	23	21
7	57	45	37	32	53	42	35	30	36	30	26	30	25	22	24	21	19
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17
9	50	37	30	25	46	35	28	23	30	24	21	25	21	18	20	17	15
10	46	34	27	22	43	32	25	21	27	22	19	23	19	16	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9467	9467	9467
5°	9491	9141	9126
10°	9406	8831	8741
15°	9275	8509	8320
20°	9125	8152	7902
25°	8932	7775	7456
30°	8719	7385	6987
35°	8496	6987	6521
40°	8264	6568	6063
45°	8008	6161	5583
50°	7747	5706	5103
55°	7413	5233	4615
60°	7069	4712	4097
65°	6747	4146	3556
70°	6281	3520	2925
75°	5611	2788	2271
80°	4843	1960	1606
85°	3775	1053	805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8008 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	1.7
10°-20°	234.1	4.7
20°-30°	345.8	7.0
30°-40°	403.8	8.2
40°-50°	406.0	8.2
50°-60°	356.6	7.2
60°-70°	265.6	5.4
70°-80°	151.1	3.1
80°-90°	45.0	0.9
90°-100°	61.3	1.2
100°-110°	185.6	3.8
110°-120°	316.0	6.4
120°-130°	415.8	8.4
130°-140°	467.3	9.5
140°-150°	459.4	9.3
150°-160°	386.8	7.8
160°-170°	257.5	5.2
170°-180°	90.2	1.8
0°-30°	662.8	13.4
0°-40°	1066.7	21.6
0°-60°	1829.3	37.1
0°-90°	2291.0	46.5
90°-120°	563.0	11.4
90°-150°	1905.5	38.6
90°-180°	2640.0	53.5
0°-180°	4931.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	880	880	880	880	880	
5°	880	876	868	876	874	83
15°	838	835	825	831	827	236
25°	761	756	746	747	745	350
35°	658	653	644	639	635	412
45°	539	536	526	517	514	416
55°	409	408	398	390	386	367
65°	279	275	268	262	259	275
75°	148	144	142	138	136	158
85°	39	38	38	36	36	42
90°	1	8	18	21	22	6
95°	44	49	55	58	58	49
105°	168	170	177	177	178	180
115°	318	320	319	320	319	315
125°	466	468	466	463	460	415
135°	604	608	608	605	603	465
145°	733	734	736	736	733	458
155°	839	839	840	843	838	386
165°	914	912	912	916	911	258
175°	950	948	948	952	947	90
180°	953	953	953	953	953	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	879.5	879.5	879.5	879.5	879.5
2.5°	883.3	880.3	872.0	879.5	878.8
5°	880.3	876.5	868.2	875.7	874.2
7.5°	873.5	869.7	861.4	868.2	867.4
10°	864.4	860.6	850.8	857.6	856.1
12.5°	852.3	849.3	840.2	844.7	844.0
15°	837.9	834.9	825.1	831.1	826.6
17.5°	822.0	818.3	808.4	813.0	811.5
20°	803.9	799.4	789.5	792.6	790.3
22.5°	783.5	778.9	769.1	771.4	768.4
25°	760.8	756.3	746.4	747.2	744.9
27.5°	737.3	732.8	722.2	723.0	720.7
30°	711.6	707.9	697.3	697.3	692.0
32.5°	685.9	680.6	673.1	667.8	665.5
35°	657.9	653.4	643.6	639.0	635.3
37.5°	630.0	623.9	614.1	608.8	606.5
40°	600.5	595.9	585.3	579.3	576.3
42.5°	571.0	565.7	555.1	549.0	546.0
45°	539.2	536.2	526.4	517.3	513.5
47.5°	508.2	503.7	494.6	485.5	482.5
50°	476.4	472.7	462.8	454.5	450.0
52.5°	443.2	440.9	430.3	423.5	419.0
55°	409.1	408.4	398.5	390.2	386.4
57.5°	377.4	374.3	366.8	359.2	354.7
60°	342.6	341.8	332.8	325.9	322.2
62.5°	311.6	309.3	300.2	293.4	291.2
65°	279.1	275.3	267.7	261.7	259.4
67.5°	244.3	241.2	235.2	229.9	226.9
70°	213.3	208.7	204.2	198.9	195.1
72.5°	180.7	177.7	172.4	167.9	166.4
75°	147.5	144.4	142.2	138.4	136.1
77.5°	118.0	116.5	113.4	110.4	110.4
80°	89.2	87.0	85.5	84.7	84.7
82.5°	61.3	61.3	61.3	59.7	59.0
85°	39.3	37.8	37.8	36.3	36.3
87.5°	19.7	17.4	16.6	15.9	15.9
90°	0.7	8.2	18.0	21.0	22.5
92.5°	22.5	26.9	31.4	33.7	32.2
95°	44.2	49.4	55.4	58.4	58.4
97.5°	72.6	76.3	80.8	84.6	83.8
100°	101.8	106.3	110.0	112.3	113.8
102.5°	135.5	137.7	143.0	145.2	144.5
105°	168.4	169.9	176.6	176.6	178.1
107.5°	207.3	208.1	211.1	213.3	212.6
110°	243.2	244.7	246.2	249.2	247.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	280.7	281.4	281.4	285.2	285.2
115°	318.1	320.3	318.8	319.6	318.8
117.5°	356.3	357.0	355.5	355.5	353.3
120°	391.4	395.9	392.2	391.4	389.9
122.5°	428.1	431.1	429.6	427.4	425.1
125°	465.5	467.8	466.3	463.3	460.3
127.5°	500.0	504.5	503.0	498.5	495.5
130°	534.4	540.4	538.1	535.1	529.9
132.5°	568.8	574.8	573.3	569.6	565.8
135°	604.0	608.5	607.7	604.8	603.3
137.5°	636.2	639.9	642.2	638.4	636.2
140°	669.9	673.6	674.4	673.6	668.4
142.5°	700.6	704.3	705.8	705.0	701.3
145°	732.7	734.2	736.5	735.7	732.7
147.5°	760.4	763.4	765.7	765.7	761.2
150°	789.6	791.1	792.6	792.6	788.1
152.5°	813.6	815.8	816.6	818.1	814.3
155°	839.0	839.0	839.8	842.8	837.5
157.5°	860.7	860.0	860.7	863.7	859.2
160°	880.9	879.4	879.4	883.2	880.2
162.5°	898.9	896.6	897.4	901.1	895.9
165°	913.9	911.6	911.6	916.1	910.9
167.5°	926.6	923.6	924.3	928.8	924.3
170°	937.1	934.1	934.1	939.3	934.1
172.5°	945.3	942.3	942.3	946.8	941.6
175°	950.5	947.5	947.5	952.0	946.8
177.5°	953.5	950.5	950.5	955.0	949.8
180°	952.8	952.8	952.8	952.8	952.8

(END OF REPORT)