

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: P1031813

Luminaire Tested: S123DIW-B560D755UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031813
REPORT IS A COMBINATION OF REPORTS P991777 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-D1
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

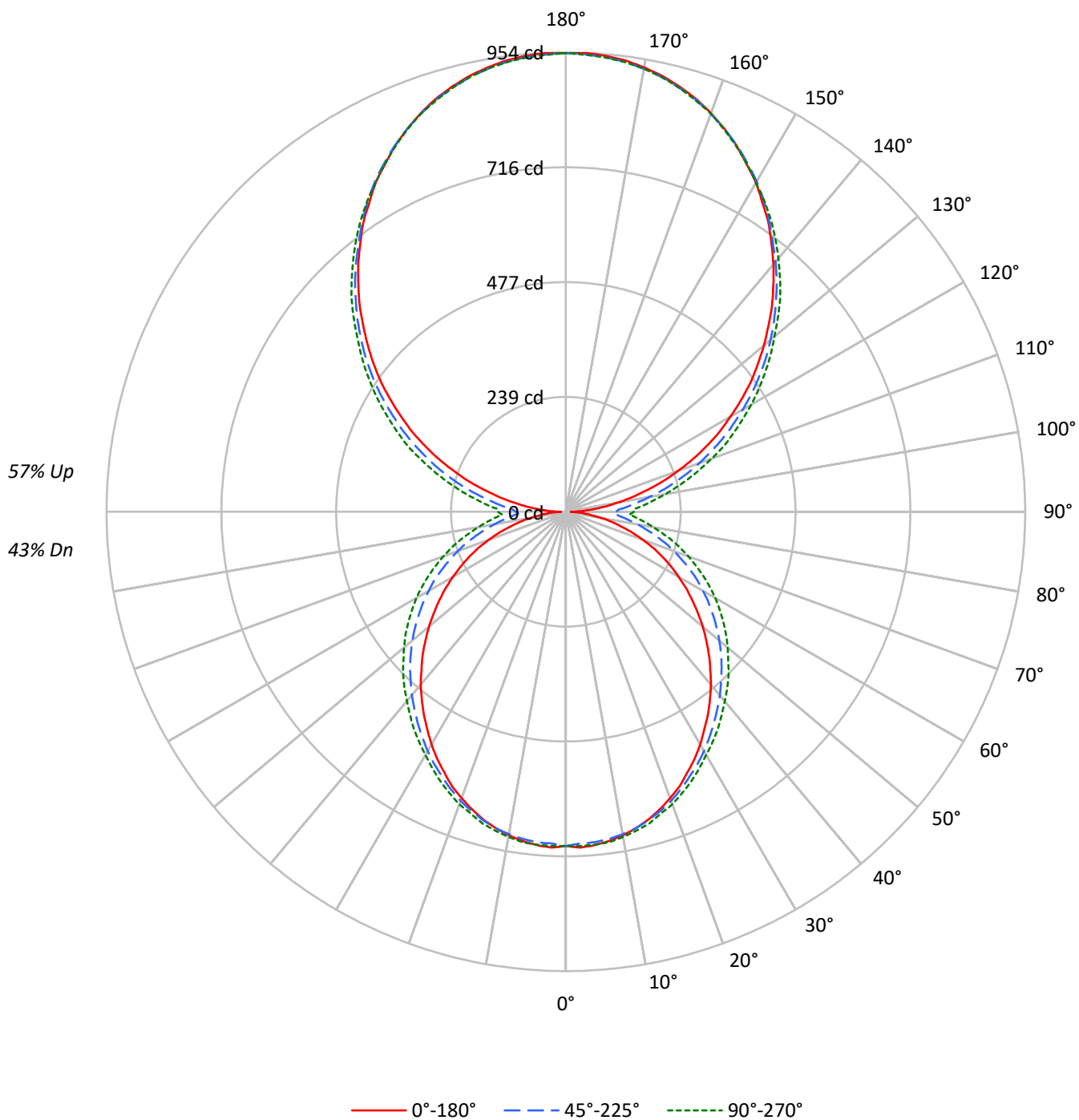
Lumens per Lamp: N/A
Luminaire Lumens: 4975.0 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 47.2
Input Voltage (V):
Input Current (A_{in}): 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

TEST NUMBER: P1031813

CATALOG NUMBER: S123DIW-B560D755UB27-4F0-XX-W2A-D1

Luminous Intensity Polar Plot



TEST NUMBER: P1031813

CATALOG NUMBER: S123DIW-B560D755UB27-4F0-XX-W2A-D1

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°	7472	7472	7472
5°	7492	7253	7247
10°	7423	7056	7003
15°	7325	6840	6743
20°	7184	6598	6464
25°	7013	6325	6177
30°	6838	6078	5887
35°	6641	5820	5651
40°	6452	5584	5402
45°	6243	5355	5196
50°	6038	5128	4974
55°	5809	4895	4769
60°	5586	4657	4558
65°	5357	4403	4313
70°	5009	4120	4059
75°	4572	3795	3797
80°	4066	3466	3499
85°	3564	3200	3285

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6243 cd/sqm

TEST NUMBER: P1031813

CATALOG NUMBER: S123DIW-B560D755UB27-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.9	1.3
10°-20°	187.7	3.8
20°-30°	280.7	5.6
30°-40°	335.2	6.7
40°-50°	350.7	7.0
50°-60°	329.1	6.6
60°-70°	274.9	5.5
70°-80°	196.5	4.0
80°-90°	119.0	2.4
90°-100°	134.8	2.7
100°-110°	239.7	4.8
110°-120°	352.1	7.1
120°-130°	436.3	8.8
130°-140°	476.6	9.6
140°-150°	461.4	9.3
150°-160°	386.8	7.8
160°-170°	257.5	5.2
170°-180°	90.2	1.8
0°-30°	534.3	10.7
0°-40°	869.5	17.5
0°-60°	1549.3	31.1
0°-90°	2139.7	43.0
90°-120°	726.6	14.6
90°-150°	2100.8	42.2
90°-180°	2835.0	57.0
0°-180°	4975.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	694	694	694	694	694	
5°	695	693	689	695	694	66
15°	662	664	663	671	670	186
25°	597	605	607	617	617	275
35°	514	526	536	548	550	322
45°	420	439	458	472	478	324
55°	321	346	373	393	399	287
65°	222	251	284	307	315	219
75°	120	156	194	218	228	128
85°	37	75	115	141	148	38
90°	10	55	103	132	141	10
95°	52	87	130	157	164	55
105°	174	194	233	254	263	186
115°	322	333	359	378	383	319
125°	468	470	490	503	506	417
135°	606	609	617	628	630	467
145°	734	734	736	742	742	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	

TEST NUMBER: P1031813

CATALOG NUMBER: S123DIW-B560D755UB27-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	694.2	694.2	694.2	694.2	694.2
2.5°	698.0	695.7	689.6	695.7	694.9
5°	694.9	693.4	688.9	694.9	694.2
7.5°	689.6	689.6	685.1	692.7	691.9
10°	682.1	683.6	679.8	687.4	685.9
12.5°	673.0	675.3	673.0	679.8	678.3
15°	661.7	663.9	663.2	670.7	670.0
17.5°	648.1	652.6	651.8	658.6	657.1
20°	632.9	637.5	639.0	645.8	646.5
22.5°	617.1	621.6	623.9	632.9	632.2
25°	597.4	605.0	607.2	617.1	617.1
27.5°	578.5	586.8	591.3	599.7	600.4
30°	558.1	567.9	573.9	583.0	583.0
32.5°	535.4	546.7	555.0	564.9	567.1
35°	514.2	526.3	536.1	547.5	550.5
37.5°	491.5	505.1	516.5	529.3	531.6
40°	468.8	482.4	497.6	510.4	513.5
42.5°	443.9	461.3	477.2	491.5	496.1
45°	420.4	438.6	457.5	471.9	477.9
47.5°	395.5	415.9	437.1	453.0	457.5
50°	371.3	392.5	415.9	433.3	438.6
52.5°	345.6	368.3	394.7	412.9	419.7
55°	320.6	345.6	372.8	393.2	399.3
57.5°	296.4	322.1	351.6	372.0	378.9
60°	270.7	297.9	328.9	350.1	358.4
62.5°	246.5	274.5	307.8	328.9	336.5
65°	221.6	251.1	284.3	307.0	314.6
67.5°	196.6	227.6	260.9	285.8	291.9
70°	170.1	202.7	239.0	263.2	270.7
72.5°	145.9	178.5	216.3	241.2	248.8
75°	120.2	155.8	193.6	218.5	227.6
77.5°	98.3	133.8	171.7	198.1	204.9
80°	74.9	111.9	151.2	176.9	184.5
82.5°	54.4	92.3	132.3	158.0	165.6
85°	37.1	74.9	114.9	140.7	148.2
87.5°	22.7	60.5	99.1	124.8	132.3
90°	10.5	55.1	103.4	132.2	141.2
92.5°	31.6	68.5	110.8	138.1	143.4
95°	52.5	87.2	130.3	156.7	164.3
97.5°	80.2	111.1	151.1	177.6	184.4
100°	108.6	137.3	175.8	200.0	209.1
102.5°	141.5	164.9	204.3	227.6	234.5
105°	174.4	194.1	233.3	254.5	262.8
107.5°	212.6	229.3	263.3	285.9	292.0
110°	247.7	262.8	294.6	317.3	321.8

TEST NUMBER: P1031813

CATALOG NUMBER: S123DIW-B560D755UB27-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	285.2	296.5	325.3	348.0	354.8
115°	321.9	333.2	358.9	377.8	383.1
117.5°	360.1	366.8	391.0	409.2	413.0
120°	394.4	402.7	424.0	440.6	444.3
122.5°	431.1	435.6	457.6	472.0	475.0
125°	467.8	470.1	490.5	503.4	505.7
127.5°	502.3	506.0	523.4	534.0	536.3
130°	536.7	541.9	554.7	566.1	565.4
132.5°	570.3	576.3	586.2	596.1	597.6
135°	605.5	609.3	616.8	627.5	629.8
137.5°	637.7	640.7	648.2	656.5	658.1
140°	670.7	674.4	677.4	688.0	686.5
142.5°	701.4	704.3	705.8	714.8	714.9
145°	733.5	734.2	736.5	741.7	741.8
147.5°	760.4	763.4	765.7	768.0	766.5
150°	789.6	791.1	792.6	792.6	789.6
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)