

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: P1031812

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031812
REPORT IS A COMBINATION OF REPORTS P991776 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-D
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

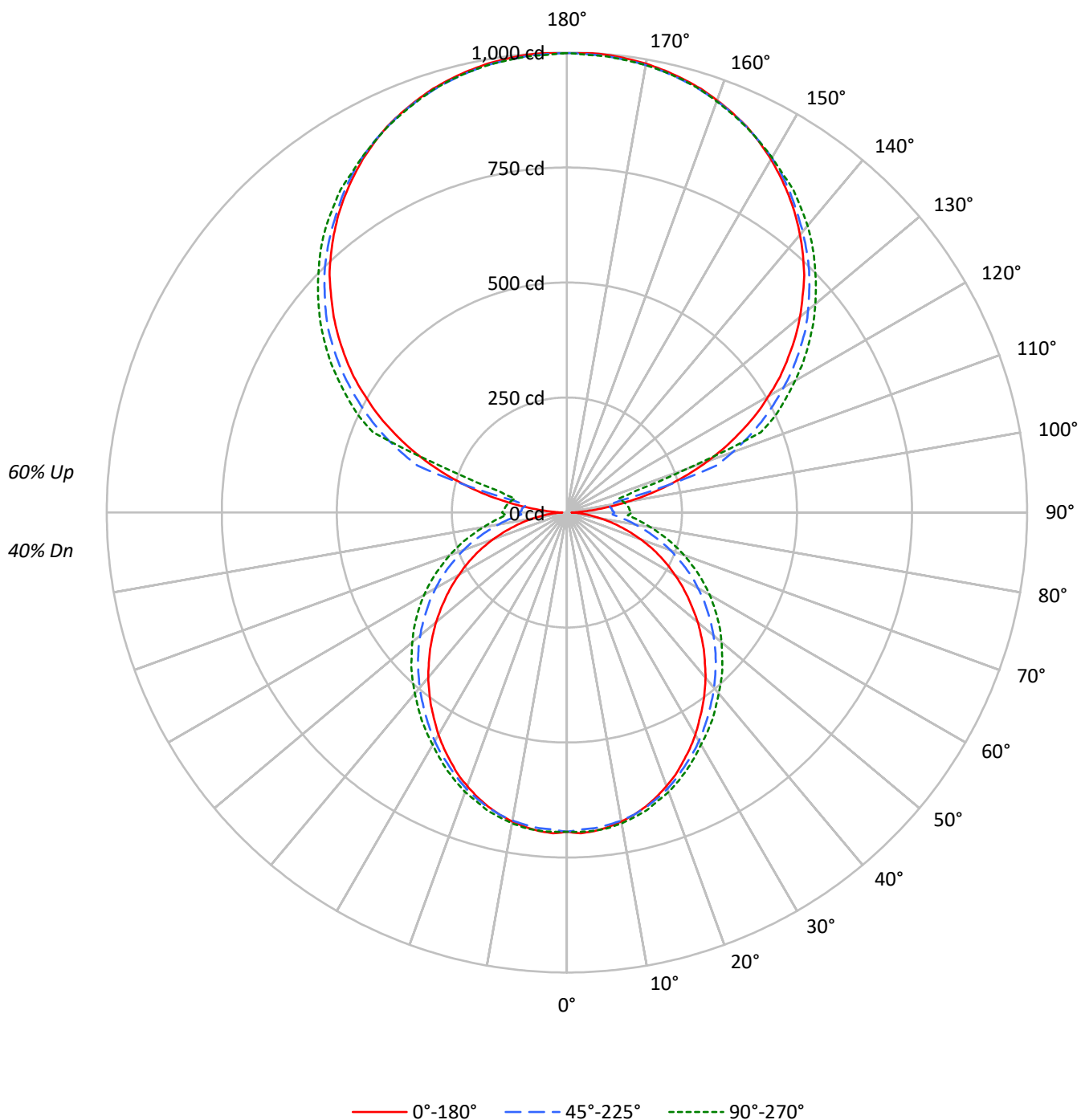
Lumens per Lamp: N/A
Luminaire Lumens: 5380.0 lumens
Efficiency: N/A
Efficacy: 114.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

TEST NUMBER: P1031812

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

Luminous Intensity Polar Plot



TEST NUMBER: P1031812

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

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	47	47	40
1	95	90	86	82	86	82	78	75	67	64	62	53	51	49	40	39	38	38	38	32
2	86	78	72	66	78	71	66	61	58	54	51	46	43	41	35	33	31	31	31	26
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	26	26	22
4	71	60	52	46	64	55	48	43	45	40	36	36	32	29	27	24	22	22	22	18
5	65	54	45	39	59	49	42	36	40	35	30	32	28	25	24	21	19	19	19	16
6	60	48	40	34	54	44	37	31	36	31	26	29	25	22	22	19	17	17	17	14
7	55	43	35	29	50	39	32	27	33	27	23	26	22	19	20	17	15	15	15	12
8	51	39	31	26	46	36	29	24	30	24	20	24	20	17	18	15	13	13	13	11
9	48	35	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12	12	12	10
10	45	32	25	20	40	30	23	19	25	20	16	20	16	14	16	13	11	11	11	9

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: P1031812

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.9	1.2
10°-20°	187.7	3.5
20°-30°	280.7	5.2
30°-40°	335.2	6.2
40°-50°	350.7	6.5
50°-60°	329.1	6.1
60°-70°	274.9	5.1
70°-80°	196.5	3.7
80°-90°	119.0	2.2
90°-100°	108.7	2.0
100°-110°	224.3	4.2
110°-120°	453.4	8.4
120°-130°	550.3	10.2
130°-140°	575.2	10.7
140°-150°	531.1	9.9
150°-160°	426.9	7.9
160°-170°	275.5	5.1
170°-180°	94.9	1.8
0°-30°	534.3	9.9
0°-40°	869.5	16.2
0°-60°	1549.3	28.8
0°-90°	2139.6	39.8
90°-120°	786.4	14.6
90°-150°	2443.1	45.4
90°-180°	3240.0	60.2
0°-180°	5380.0	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°	54	53	98	126	134	61
105°	227	254	219	109	117	241
115°	419	432	466	492	501	414
125°	587	593	618	635	642	525
135°	730	733	744	760	762	562
145°	841	845	847	854	857	526
155°	925	924	925	928	924	426
165°	976	974	973	979	974	276
175°	999	995	996	1001	995	95
180°	999	999	999	999	999	

TEST NUMBER: P1031812

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

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	103.2	132.0	141.0
92.5°	26.2	54.2	98.7	128.9	136.4
95°	53.6	52.6	97.9	126.5	134.1
97.5°	90.0	96.4	94.0	122.7	131.0
100°	132.2	171.3	90.3	118.1	126.5
102.5°	180.4	211.2	116.2	112.8	121.9
105°	227.1	253.5	219.2	109.1	117.4
107.5°	276.2	298.7	340.9	247.0	156.6
110°	325.1	344.6	383.1	378.3	278.2

TEST NUMBER: P1031812

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	372.6	388.4	425.3	450.9	456.2
115°	418.6	432.2	466.0	491.6	500.6
117.5°	464.6	475.8	505.2	529.4	536.1
120°	506.1	516.6	543.8	567.2	572.4
122.5°	549.2	555.9	582.3	602.6	608.7
125°	587.1	593.0	617.9	635.2	642.0
127.5°	625.6	630.8	653.4	670.7	674.5
130°	661.3	666.4	684.5	701.8	704.8
132.5°	694.6	700.5	714.2	730.7	733.8
135°	729.5	733.2	744.5	760.3	761.9
137.5°	759.2	764.4	771.1	786.9	789.2
140°	788.1	792.6	797.0	811.4	813.6
142.5°	815.6	819.2	821.5	833.5	835.1
145°	840.8	845.2	846.7	854.2	857.3
147.5°	864.5	868.2	869.7	873.5	872.8
150°	886.8	889.0	890.5	892.0	891.2
152.5°	906.8	907.6	908.3	911.3	907.6
155°	925.4	923.9	924.6	928.3	923.9
157.5°	940.2	940.2	939.5	943.9	938.0
160°	953.6	952.8	952.1	956.5	951.3
162.5°	966.2	963.9	963.2	968.4	963.9
165°	975.8	973.6	972.9	978.8	973.6
167.5°	984.0	981.0	981.0	987.0	981.0
170°	990.7	987.7	987.7	993.6	987.7
172.5°	995.1	991.4	992.1	998.1	991.4
175°	998.8	995.1	995.9	1001.1	995.1
177.5°	1000.3	996.6	997.3	1003.3	995.9
180°	998.8	998.8	998.8	998.8	998.8

(END OF REPORT)