

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: P1031757

Luminaire Tested: S123DIW-B560D1535UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031757
REPORT IS A COMBINATION OF REPORTS P991647 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D1535UB27-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

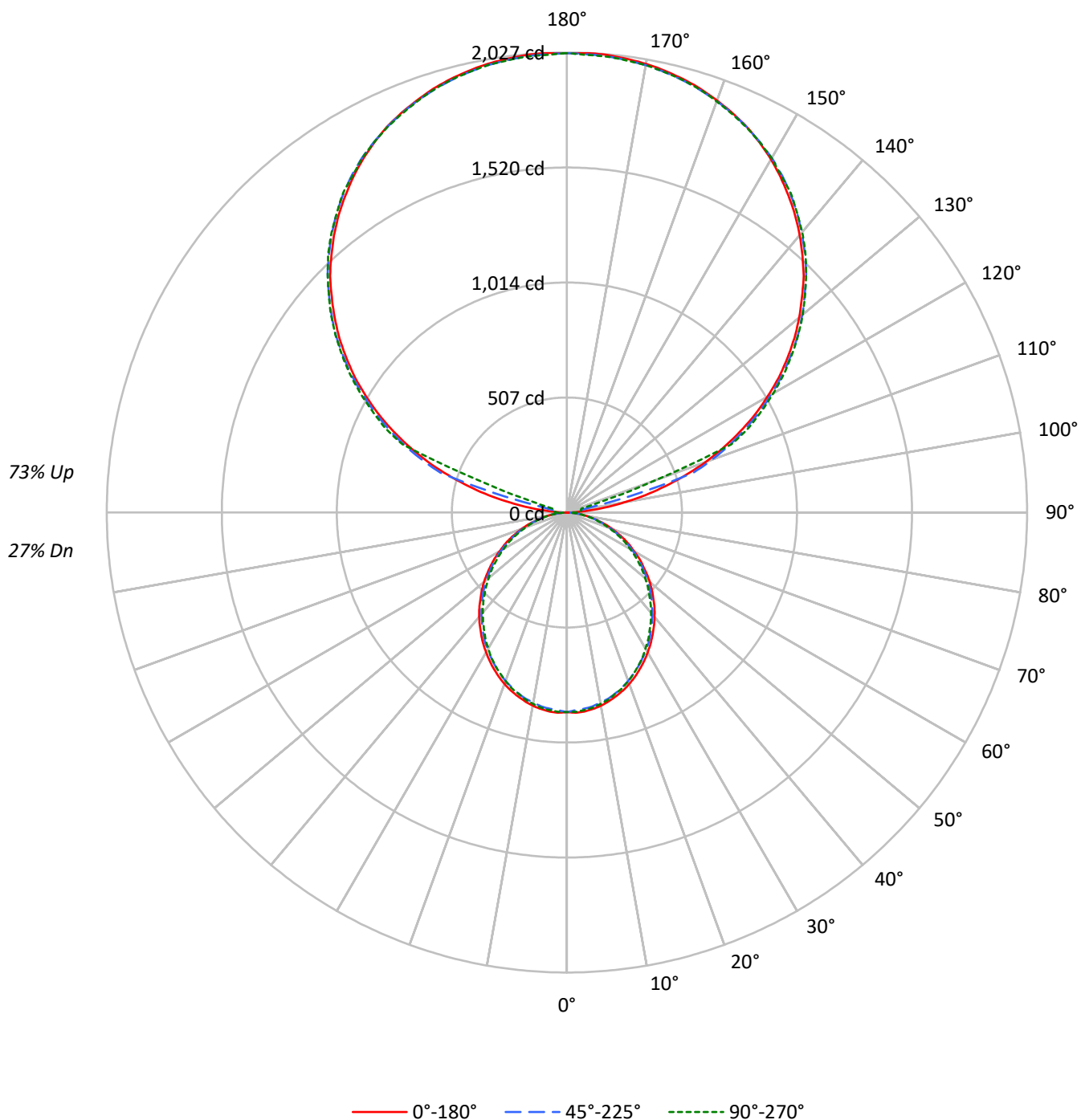
Lumens per Lamp: N/A
Luminaire Lumens: 8464.0 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 76.2
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: P1031757

CATALOG NUMBER: S123DIW-B560D1535UB27-4F0-XX-W2A-F

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	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35
1	93	88	85	81	83	79	76	73	62	60	58	46	44	43	31	30	29
2	84	77	71	66	75	69	64	60	54	51	48	40	38	36	27	26	25
3	77	68	61	55	68	61	55	50	48	43	40	35	33	30	24	22	21
4	70	60	52	46	62	54	47	42	42	38	34	31	28	26	21	20	18
5	64	53	45	40	57	48	41	36	38	33	29	28	25	22	19	17	16
6	59	47	40	34	53	43	36	31	34	29	25	25	22	19	17	15	14
7	55	43	35	30	49	38	32	27	30	26	22	23	20	17	16	14	12
8	50	39	31	26	45	35	28	24	28	23	19	21	18	15	15	12	11
9	47	35	28	23	42	32	25	21	25	21	17	19	16	14	13	11	10
10	44	32	25	20	39	29	23	19	23	19	15	18	14	12	12	10	9

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

TEST NUMBER: P1031757

CATALOG NUMBER: S123DIW-B560D1535UB27-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	1.0
10°-20°	234.1	2.8
20°-30°	345.8	4.1
30°-40°	403.8	4.8
40°-50°	406.0	4.8
50°-60°	356.6	4.2
60°-70°	265.6	3.1
70°-80°	151.1	1.8
80°-90°	47.0	0.6
90°-100°	71.4	0.8
100°-110°	345.1	4.1
110°-120°	845.7	10.0
120°-130°	1073.6	12.7
130°-140°	1146.9	13.6
140°-150°	1072.5	12.7
150°-160°	865.1	10.2
160°-170°	558.3	6.6
170°-180°	192.4	2.3
0°-30°	662.8	7.8
0°-40°	1066.7	12.6
0°-60°	1829.3	21.6
0°-90°	2293.1	27.1
90°-120°	1262.2	14.9
90°-150°	4555.2	53.8
90°-180°	6171.0	72.9
0°-180°	8464.0	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°	2	16	36	42	45	8
95°	92	30	47	57	57	110
105°	448	465	329	63	66	475
115°	841	850	863	878	884	830
125°	1185	1197	1203	1206	1209	1059
135°	1475	1484	1490	1495	1490	1136
145°	1702	1713	1716	1719	1719	1066
155°	1875	1872	1874	1881	1872	864
165°	1978	1973	1972	1984	1973	559
175°	2024	2017	2018	2029	2017	193
180°	2024	2024	2024	2024	2024	

TEST NUMBER: P1031757

CATALOG NUMBER: S123DIW-B560D1535UB27-4F0-XX-W2A-F

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°	1.5	16.5	36.1	42.1	45.1
92.5°	34.6	25.6	39.1	49.6	51.1
95°	91.7	30.1	46.6	57.1	57.1
97.5°	166.9	124.8	48.1	60.2	61.7
100°	254.2	284.2	49.6	61.7	63.2
102.5°	353.4	373.0	111.3	61.7	64.7
105°	448.2	464.7	329.3	63.2	66.2
107.5°	548.9	562.4	585.0	353.4	156.4
110°	649.7	661.7	678.2	628.6	413.6

TEST NUMBER: P1031757

CATALOG NUMBER: S123DIW-B560D1535UB27-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	745.9	756.4	773.0	786.5	783.5
115°	840.7	849.7	863.2	878.3	884.3
117.5°	933.9	944.4	951.9	964.0	965.5
120°	1019.6	1033.2	1037.7	1049.7	1049.7
122.5°	1106.8	1117.4	1123.4	1130.9	1132.4
125°	1185.0	1197.1	1203.1	1206.1	1209.1
127.5°	1263.2	1275.3	1282.8	1287.3	1284.3
130°	1335.4	1347.5	1353.5	1359.5	1356.5
132.5°	1404.6	1416.6	1421.2	1427.2	1422.7
135°	1475.3	1484.3	1490.3	1494.8	1490.3
137.5°	1535.4	1547.5	1550.5	1558.0	1555.0
140°	1595.6	1604.6	1609.1	1615.2	1612.1
142.5°	1651.2	1660.3	1664.8	1669.3	1664.8
145°	1702.4	1712.9	1715.9	1718.9	1718.9
147.5°	1752.0	1759.5	1762.5	1765.5	1758.0
150°	1797.1	1801.6	1804.6	1807.6	1803.1
152.5°	1837.7	1839.2	1840.7	1846.7	1839.2
155°	1875.3	1872.3	1873.8	1881.3	1872.3
157.5°	1905.4	1905.4	1903.9	1912.9	1900.9
160°	1932.5	1931.0	1929.5	1938.5	1928.0
162.5°	1958.0	1953.5	1952.0	1962.5	1953.5
165°	1977.6	1973.1	1971.6	1983.6	1973.1
167.5°	1994.1	1988.1	1988.1	2000.1	1988.1
170°	2007.7	2001.6	2001.6	2013.7	2001.6
172.5°	2016.7	2009.2	2010.7	2022.7	2009.2
175°	2024.2	2016.7	2018.2	2028.7	2016.7
177.5°	2027.2	2019.7	2021.2	2033.2	2018.2
180°	2024.2	2024.2	2024.2	2024.2	2024.2

(END OF REPORT)