

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: P1031901

Luminaire Tested: S123DIW-B775D1535UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031901
REPORT IS A COMBINATION OF REPORTS P991977 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D1535UB27-4F0-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

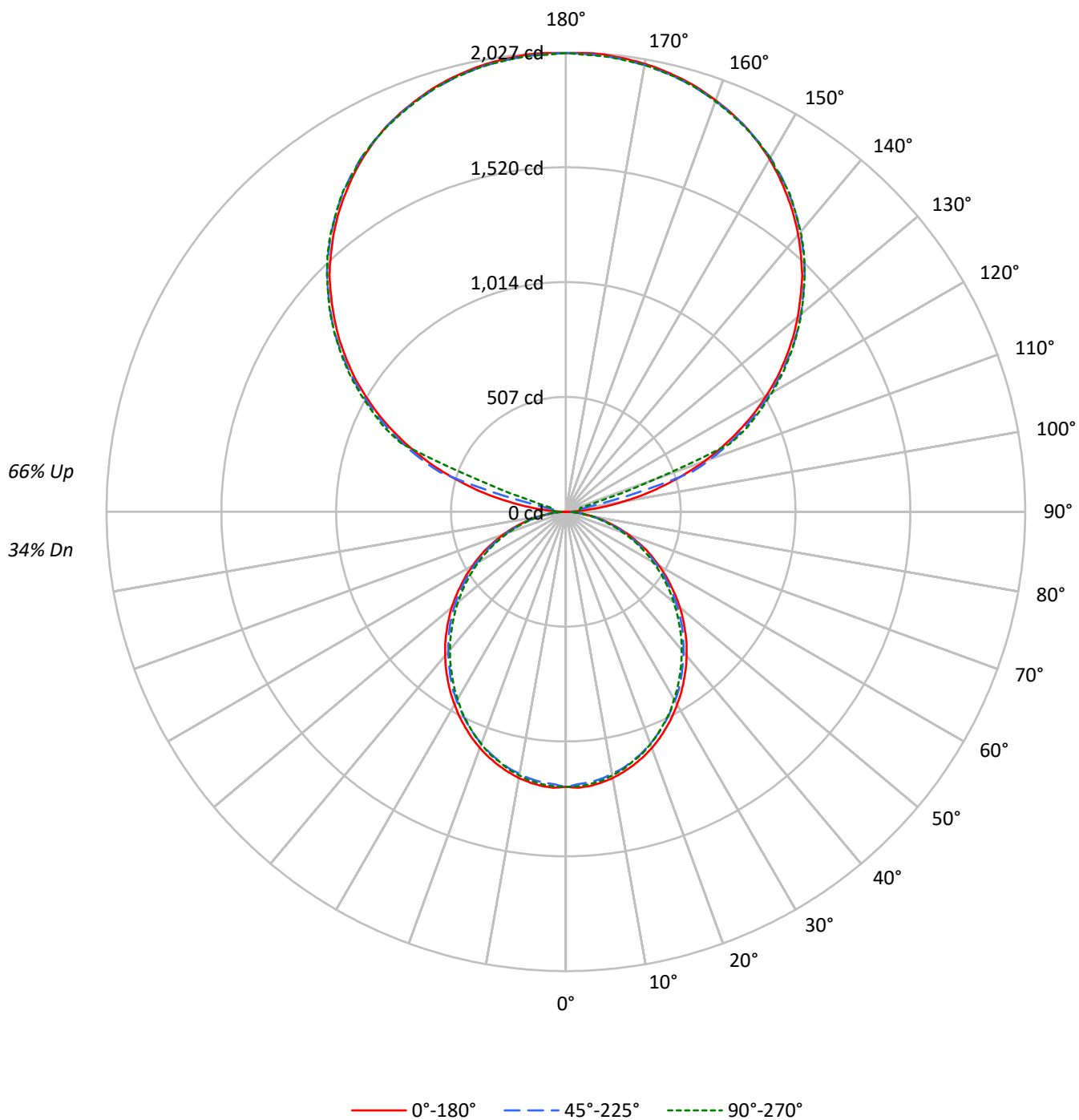
Lumens per Lamp: N/A
Luminaire Lumens: 9334.0 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 88.1
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: P1031901

CATALOG NUMBER: S123DIW-B775D1535UB27-4F0-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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41
1	94	90	86	83	85	81	78	75	65	63	61	50	49	47	36	36	35
2	86	78	72	67	77	71	66	62	57	53	50	44	42	40	32	31	29
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	26	25
4	71	61	53	47	64	55	49	43	44	40	36	35	31	29	25	23	21
5	65	54	46	40	59	49	42	37	40	35	31	31	27	25	23	20	19
6	60	48	41	35	54	44	37	32	36	31	27	28	24	21	21	18	16
7	56	44	36	30	50	40	33	28	32	27	23	25	22	19	19	16	14
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13
9	48	36	29	24	43	33	26	22	27	22	18	21	18	15	16	13	12
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	12	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13065	13065	13065
5°	13097	12615	12595
10°	12981	12187	12063
15°	12801	11744	11481
20°	12593	11250	10906
25°	12326	10730	10290
30°	12033	10192	9643
35°	11726	9642	9000
40°	11405	9065	8367
45°	11051	8502	7706
50°	10692	7875	7042
55°	10230	7222	6369
60°	9756	6501	5654
65°	9309	5723	4908
70°	8667	4858	4038
75°	7741	3846	3135
80°	6688	2702	2217
85°	5216	1454	1110

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11051 cd/sqm

TEST NUMBER: P1031901

CATALOG NUMBER: S123DIW-B775D1535UB27-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.4	1.2
10°-20°	323.1	3.5
20°-30°	477.2	5.1
30°-40°	557.3	6.0
40°-50°	560.3	6.0
50°-60°	492.2	5.3
60°-70°	366.6	3.9
70°-80°	208.6	2.2
80°-90°	63.3	0.7
90°-100°	71.4	0.8
100°-110°	345.1	3.7
110°-120°	845.7	9.1
120°-130°	1073.6	11.5
130°-140°	1146.9	12.3
140°-150°	1072.5	11.5
150°-160°	865.1	9.3
160°-170°	558.3	6.0
170°-180°	192.4	2.1
0°-30°	914.7	9.8
0°-40°	1472.1	15.8
0°-60°	2524.5	27.0
0°-90°	3163.0	33.9
90°-120°	1262.2	13.5
90°-150°	4555.2	48.8
90°-180°	6171.0	66.1
0°-180°	9334.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1214	1214	1214	1214	1214	
5°	1215	1210	1198	1209	1206	115
15°	1156	1152	1139	1147	1141	326
25°	1050	1044	1030	1031	1028	484
35°	908	902	888	882	877	568
45°	744	740	726	714	709	574
55°	565	564	550	538	533	506
65°	385	380	370	361	358	380
75°	204	199	196	191	188	217
85°	54	52	52	50	50	58
90°	2	16	36	42	45	9
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: P1031901

CATALOG NUMBER: S123DIW-B775D1535UB27-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1213.8	1213.8	1213.8	1213.8	1213.8
2.5°	1219.0	1214.8	1203.4	1213.8	1212.8
5°	1214.8	1209.6	1198.2	1208.6	1206.5
7.5°	1205.5	1200.2	1188.8	1198.2	1197.1
10°	1192.9	1187.7	1174.1	1183.5	1181.5
12.5°	1176.2	1172.1	1159.5	1165.8	1164.8
15°	1156.4	1152.2	1138.7	1147.0	1140.7
17.5°	1134.5	1129.3	1115.7	1122.0	1119.9
20°	1109.4	1103.2	1089.6	1093.8	1090.7
22.5°	1081.3	1075.0	1061.4	1064.6	1060.4
25°	1049.9	1043.7	1030.1	1031.2	1028.0
27.5°	1017.6	1011.3	996.7	997.8	994.6
30°	982.1	976.9	962.3	962.3	955.0
32.5°	946.6	939.3	928.9	921.6	918.4
35°	908.0	901.7	888.2	881.9	876.7
37.5°	869.4	861.0	847.5	840.2	837.0
40°	828.7	822.4	807.8	799.5	795.3
42.5°	788.0	780.7	766.1	757.7	753.5
45°	744.1	740.0	726.4	713.9	708.7
47.5°	701.4	695.1	682.6	670.0	665.9
50°	657.5	652.3	638.7	627.3	621.0
52.5°	611.6	608.5	593.9	584.5	578.2
55°	564.6	563.6	550.0	538.5	533.3
57.5°	520.8	516.6	506.2	495.8	489.5
60°	472.8	471.7	459.2	449.8	444.6
62.5°	430.0	426.9	414.3	404.9	401.8
65°	385.1	379.9	369.5	361.1	358.0
67.5°	337.1	332.9	324.6	317.3	313.1
70°	294.3	288.1	281.8	274.5	269.3
72.5°	249.4	245.3	238.0	231.7	229.6
75°	203.5	199.3	196.2	191.0	187.9
77.5°	162.8	160.7	156.6	152.4	152.4
80°	123.2	120.0	117.9	116.9	116.9
82.5°	84.5	84.5	84.5	82.5	81.4
85°	54.3	52.2	52.2	50.1	50.1
87.5°	27.1	24.0	23.0	21.9	21.9
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: P1031901

CATALOG NUMBER: S123DIW-B775D1535UB27-4F0-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)