

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: P1031902

Luminaire Tested: S123DIW-B775D1535UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031902
REPORT IS A COMBINATION OF REPORTS P991978 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-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

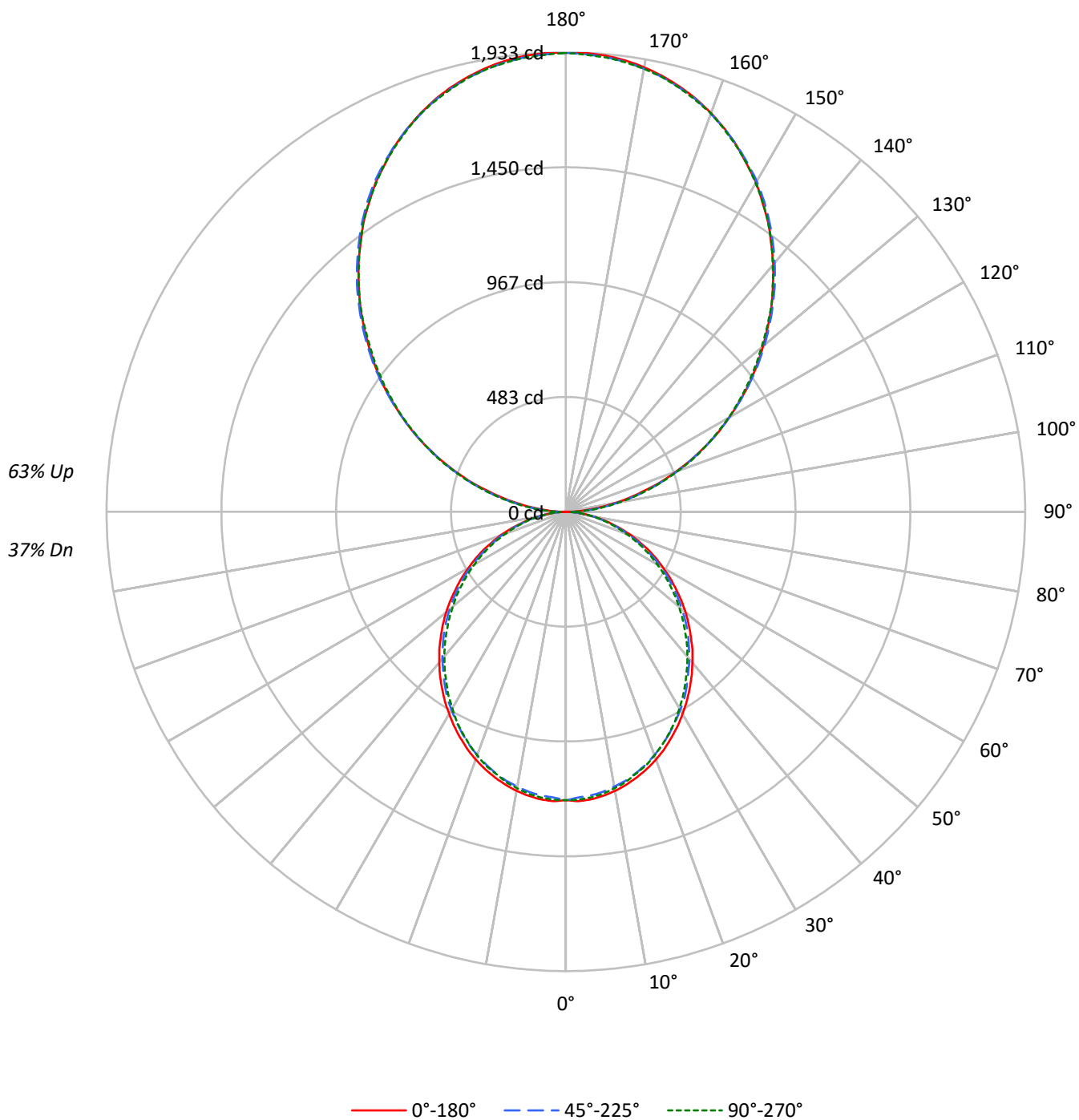
Lumens per Lamp: N/A
Luminaire Lumens: 8514.0 lumens
Efficiency: N/A
Efficacy: 96.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 88.1
Input Voltage (V):
Input Current (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

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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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	44	44	44
1	95	91	87	83	86	82	79	76	67	64	62	52	51	49	39	38	37
2	86	79	73	68	78	72	67	62	58	55	52	46	43	41	34	33	31
3	79	69	62	57	71	63	57	52	51	47	43	41	37	35	30	28	27
4	72	61	54	48	65	56	49	44	46	41	37	36	33	30	27	25	23
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	24	22	20
6	61	49	41	35	55	45	38	33	37	31	27	29	25	22	22	20	18
7	56	44	36	31	51	40	33	29	33	28	24	26	23	20	20	18	16
8	52	40	32	27	47	37	30	25	30	25	21	24	20	18	19	16	14
9	48	36	29	24	44	33	27	22	28	23	19	22	18	16	17	14	13
10	45	33	26	21	41	31	24	20	25	20	17	20	17	14	16	13	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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.4	1.3
10°-20°	323.1	3.8
20°-30°	477.2	5.6
30°-40°	557.3	6.5
40°-50°	560.3	6.6
50°-60°	492.2	5.8
60°-70°	366.6	4.3
70°-80°	208.6	2.5
80°-90°	63.4	0.7
90°-100°	124.3	1.5
100°-110°	376.3	4.4
110°-120°	640.6	7.5
120°-130°	842.7	9.9
130°-140°	947.2	11.1
140°-150°	931.2	10.9
150°-160°	784.0	9.2
160°-170°	521.9	6.1
170°-180°	182.8	2.1
0°-30°	914.7	10.7
0°-40°	1472.1	17.3
0°-60°	2524.5	29.7
0°-90°	3163.1	37.2
90°-120°	1141.1	13.4
90°-150°	3862.2	45.4
90°-180°	5351.0	62.8
0°-180°	8514.0	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	17	36	42	46	10
95°	90	100	112	118	118	99
105°	341	344	358	358	361	365
115°	645	649	646	648	646	638
125°	944	948	945	939	933	842
135°	1224	1233	1232	1226	1223	943
145°	1485	1488	1493	1491	1485	928
155°	1701	1701	1702	1708	1698	783
165°	1852	1848	1848	1857	1846	522
175°	1927	1920	1920	1930	1919	183
180°	1931	1931	1931	1931	1931	

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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	16.7	36.4	42.5	45.5
92.5°	45.5	54.6	63.7	68.3	65.2
95°	89.5	100.1	112.3	118.3	118.3
97.5°	147.2	154.7	163.8	171.4	169.9
100°	206.3	215.4	223.0	227.6	230.6
102.5°	274.6	279.1	289.8	294.3	292.8
105°	341.3	344.4	358.0	358.0	361.1
107.5°	420.2	421.7	427.8	432.4	430.8
110°	493.0	496.1	499.1	505.2	502.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	568.9	570.4	570.4	578.0	578.0
115°	644.7	649.3	646.3	647.8	646.3
117.5°	722.1	723.6	720.6	720.6	716.0
120°	793.4	802.5	794.9	793.4	790.4
122.5°	867.7	873.8	870.8	866.2	861.7
125°	943.6	948.1	945.1	939.0	933.0
127.5°	1013.4	1022.5	1019.4	1010.3	1004.3
130°	1083.2	1095.3	1090.7	1084.7	1074.1
132.5°	1152.9	1165.1	1162.0	1154.5	1146.9
135°	1224.2	1233.3	1231.8	1225.8	1222.7
137.5°	1289.5	1297.1	1301.6	1294.0	1289.5
140°	1357.7	1365.3	1366.8	1365.3	1354.7
142.5°	1419.9	1427.5	1430.6	1429.0	1421.4
145°	1485.2	1488.2	1492.7	1491.2	1485.2
147.5°	1541.3	1547.4	1551.9	1551.9	1542.8
150°	1600.5	1603.5	1606.5	1606.5	1597.4
152.5°	1649.0	1653.6	1655.1	1658.1	1650.5
155°	1700.6	1700.6	1702.1	1708.2	1697.5
157.5°	1744.6	1743.1	1744.6	1750.6	1741.5
160°	1785.5	1782.5	1782.5	1790.1	1784.0
162.5°	1821.9	1817.4	1818.9	1826.5	1815.9
165°	1852.3	1847.7	1847.7	1856.8	1846.2
167.5°	1878.1	1872.0	1873.5	1882.6	1873.5
170°	1899.3	1893.2	1893.2	1903.9	1893.2
172.5°	1916.0	1909.9	1909.9	1919.0	1908.4
175°	1926.6	1920.5	1920.5	1929.7	1919.0
177.5°	1932.7	1926.6	1926.6	1935.7	1925.1
180°	1931.2	1931.2	1931.2	1931.2	1931.2

(END OF REPORT)