

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: P1031470

Luminaire Tested: S123DIW-B1165D1535UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031470
REPORT IS A COMBINATION OF REPORTS P990988 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D1535UB27-4F0-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

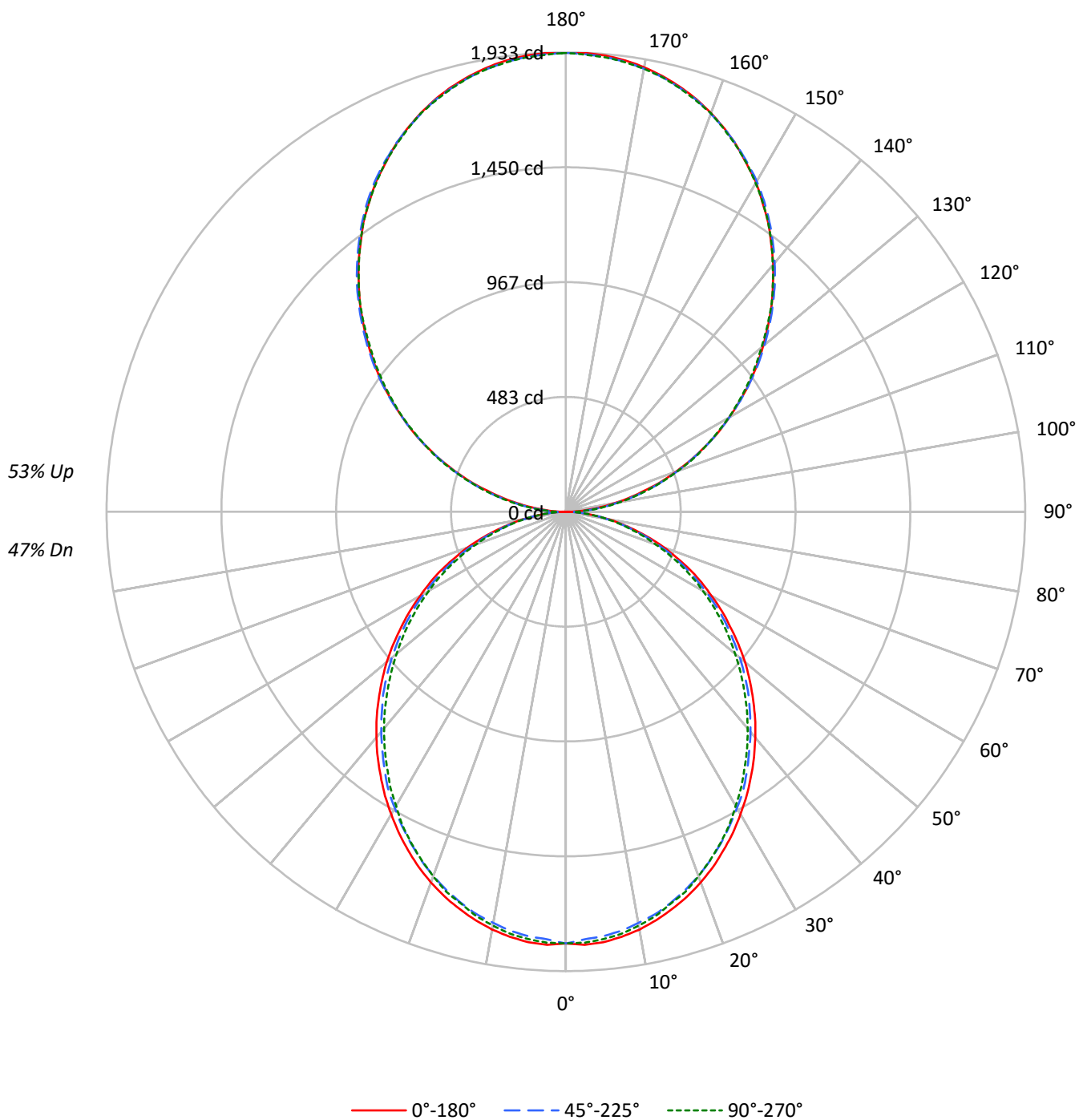
Lumens per Lamp: N/A
Luminaire Lumens: 10082.0 lumens
Efficiency: N/A
Efficacy: 88.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 113.5
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: P1031470

CATALOG NUMBER: S123DIW-B1165D1535UB27-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1031470

CATALOG NUMBER: S123DIW-B1165D1535UB27-4F0-XX-W2A-F1

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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53
1	97	93	89	85	89	85	82	79	71	69	67	59	57	56	47	46	45
2	88	81	75	70	81	75	69	65	63	59	55	52	49	46	41	39	38
3	81	71	64	58	74	66	59	54	55	50	46	46	42	39	37	34	32
4	74	63	55	49	67	58	51	46	49	44	40	41	37	34	33	30	28
5	68	56	48	42	62	52	45	39	44	38	34	36	32	29	29	26	24
6	62	50	42	36	57	46	39	34	39	34	30	33	29	25	27	24	21
7	58	45	37	32	53	42	35	30	36	30	26	30	26	22	24	21	19
8	53	41	33	28	49	38	31	26	33	27	23	27	23	20	22	19	17
9	50	37	30	25	46	35	28	24	30	24	21	25	21	18	21	18	15
10	46	34	27	22	43	32	25	21	27	22	19	23	19	16	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19550	19550	19550
5°	19600	18876	18848
10°	19425	18237	18050
15°	19155	17572	17181
20°	18845	16834	16318
25°	18444	16057	15398
30°	18006	15251	14429
35°	17547	14428	13467
40°	17066	13565	12519
45°	16537	12723	11530
50°	15999	11785	10537
55°	15309	10807	9531
60°	14599	9730	8461
65°	13931	8563	7344
70°	12969	7269	6041
75°	11583	5755	4690
80°	10006	4046	3317
85°	7800	2175	1662

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16537 cd/sqm

TEST NUMBER: P1031470

CATALOG NUMBER: S123DIW-B1165D1535UB27-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.2	1.7
10°-20°	483.5	4.8
20°-30°	714.1	7.1
30°-40°	834.0	8.3
40°-50°	838.4	8.3
50°-60°	736.5	7.3
60°-70°	548.5	5.4
70°-80°	312.1	3.1
80°-90°	92.8	0.9
90°-100°	124.3	1.2
100°-110°	376.3	3.7
110°-120°	640.6	6.4
120°-130°	842.7	8.4
130°-140°	947.2	9.4
140°-150°	931.2	9.2
150°-160°	784.0	7.8
160°-170°	521.9	5.2
170°-180°	182.8	1.8
0°-30°	1368.8	13.6
0°-40°	2202.7	21.8
0°-60°	3777.6	37.5
0°-90°	4731.1	46.9
90°-120°	1141.1	11.3
90°-150°	3862.2	38.3
90°-180°	5351.0	53.1
0°-180°	10082.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1816	1816	1816	1816	1816	
5°	1818	1810	1793	1808	1805	172
15°	1730	1724	1704	1716	1707	488
25°	1571	1562	1541	1543	1538	724
35°	1359	1349	1329	1320	1312	850
45°	1114	1107	1087	1068	1060	860
55°	845	843	823	806	798	757
65°	576	568	553	540	536	569
75°	304	298	294	286	281	325
85°	81	78	78	75	75	87
90°	2	17	36	42	46	12
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	

TEST NUMBER: P1031470

CATALOG NUMBER: S123DIW-B1165D1535UB27-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1816.3	1816.3	1816.3	1816.3	1816.3
2.5°	1824.1	1817.9	1800.7	1816.3	1814.7
5°	1817.9	1810.0	1792.9	1808.5	1805.4
7.5°	1803.8	1796.0	1778.8	1792.9	1791.3
10°	1785.1	1777.2	1756.9	1771.0	1767.9
12.5°	1760.1	1753.8	1735.1	1744.5	1742.9
15°	1730.4	1724.1	1703.8	1716.3	1707.0
17.5°	1697.6	1689.8	1669.5	1678.9	1675.7
20°	1660.1	1650.7	1630.4	1636.7	1632.0
22.5°	1618.0	1608.6	1588.3	1593.0	1586.7
25°	1571.1	1561.7	1541.4	1543.0	1538.3
27.5°	1522.7	1513.3	1491.5	1493.0	1488.3
30°	1469.6	1461.8	1439.9	1439.9	1429.0
32.5°	1416.5	1405.6	1389.9	1379.0	1374.3
35°	1358.7	1349.3	1329.0	1319.7	1311.9
37.5°	1300.9	1288.4	1268.1	1257.2	1252.5
40°	1240.0	1230.6	1208.8	1196.3	1190.0
42.5°	1179.1	1168.2	1146.3	1133.8	1127.6
45°	1113.5	1107.3	1087.0	1068.2	1060.4
47.5°	1049.5	1040.1	1021.4	1002.6	996.4
50°	983.9	976.1	955.8	938.6	929.2
52.5°	915.2	910.5	888.6	874.6	865.2
55°	844.9	843.3	823.0	805.9	798.0
57.5°	779.3	773.1	757.4	741.8	732.5
60°	707.5	705.9	687.2	673.1	665.3
62.5°	643.4	638.7	620.0	606.0	601.3
65°	576.3	568.5	552.9	540.4	535.7
67.5°	504.4	498.2	485.7	474.8	468.5
70°	440.4	431.0	421.7	410.7	402.9
72.5°	373.3	367.0	356.1	346.7	343.6
75°	304.5	298.3	293.6	285.8	281.1
77.5°	243.6	240.5	234.3	228.0	228.0
80°	184.3	179.6	176.5	174.9	174.9
82.5°	126.5	126.5	126.5	123.4	121.8
85°	81.2	78.1	78.1	75.0	75.0
87.5°	40.6	35.9	34.4	32.8	32.8
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

TEST NUMBER: P1031470

CATALOG NUMBER: S123DIW-B1165D1535UB27-4F0-XX-W2A-F1

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)