

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: P1031526

Luminaire Tested: S123DIW-B1165D755UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031526
REPORT IS A COMBINATION OF REPORTS P991119 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D755UB27-4F0-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

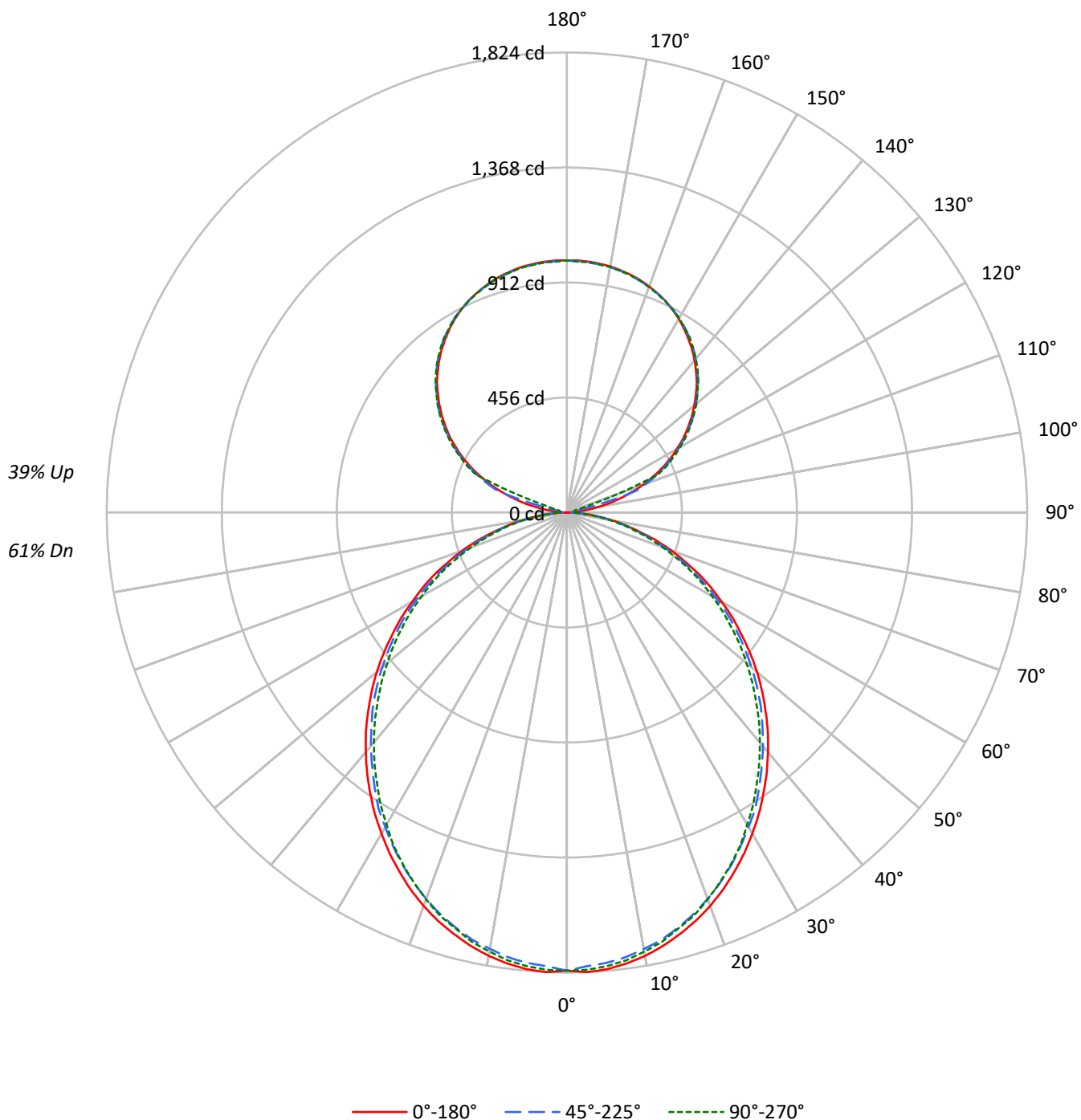
Lumens per Lamp: N/A
Luminaire Lumens: 7774.0 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 84.5
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: P1031526

CATALOG NUMBER: S123DIW-B1165D755UB27-4F0-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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66
1	100	96	92	88	94	90	86	83	78	76	73	68	66	64	58	57	56
2	91	84	77	72	85	78	73	68	69	64	61	60	56	54	51	49	47
3	83	73	66	60	77	69	62	57	61	55	51	53	49	45	45	42	40
4	76	65	57	51	71	61	54	48	54	48	44	47	42	39	41	37	34
5	70	58	50	44	65	55	47	42	48	42	38	42	37	34	37	33	30
6	64	52	44	38	60	49	42	36	43	37	33	38	33	30	33	29	26
7	60	47	39	33	56	44	37	32	39	33	29	35	30	26	30	26	23
8	55	43	35	29	52	40	33	28	36	30	26	32	27	23	28	24	21
9	52	39	31	26	48	37	30	25	33	27	23	29	24	21	26	22	19
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	24	20	17

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: P1031526

CATALOG NUMBER: S123DIW-B1165D755UB27-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.2	2.2
10°-20°	483.5	6.2
20°-30°	714.1	9.2
30°-40°	834.0	10.7
40°-50°	838.4	10.8
50°-60°	736.5	9.5
60°-70°	548.5	7.1
70°-80°	312.1	4.0
80°-90°	90.7	1.2
90°-100°	35.2	0.5
100°-110°	170.3	2.2
110°-120°	417.3	5.4
120°-130°	529.8	6.8
130°-140°	565.9	7.3
140°-150°	529.2	6.8
150°-160°	426.9	5.5
160°-170°	275.5	3.5
170°-180°	94.9	1.2
0°-30°	1368.8	17.6
0°-40°	2202.7	28.3
0°-60°	3777.6	48.6
0°-90°	4729.0	60.8
90°-120°	622.8	8.0
90°-150°	2247.8	28.9
90°-180°	3045.0	39.2
0°-180°	7774.0	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°	1	8	18	21	22	8
95°	45	15	23	28	28	54
105°	221	229	162	31	33	234
115°	415	419	426	433	436	410
125°	585	591	594	595	597	522
135°	728	732	735	738	735	560
145°	840	845	847	848	848	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: P1031526

CATALOG NUMBER: S123DIW-B1165D755UB27-4F0-XX-W2A-F

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°	0.7	8.2	17.8	20.8	22.3
92.5°	17.1	12.6	19.3	24.5	25.2
95°	45.3	14.8	23.0	28.2	28.2
97.5°	82.4	61.6	23.7	29.7	30.4
100°	125.4	140.3	24.5	30.4	31.2
102.5°	174.4	184.0	54.9	30.4	31.9
105°	221.1	229.3	162.5	31.2	32.7
107.5°	270.9	277.5	288.7	174.4	77.2
110°	320.6	326.5	334.7	310.2	204.1

TEST NUMBER: P1031526

CATALOG NUMBER: S123DIW-B1165D755UB27-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	368.1	373.3	381.4	388.1	386.6
115°	414.8	419.3	425.9	433.4	436.3
117.5°	460.8	466.0	469.7	475.7	476.4
120°	503.1	509.8	512.0	518.0	518.0
122.5°	546.2	551.4	554.3	558.0	558.8
125°	584.8	590.7	593.7	595.1	596.6
127.5°	623.3	629.3	633.0	635.2	633.7
130°	659.0	664.9	667.9	670.8	669.3
132.5°	693.1	699.0	701.3	704.2	702.0
135°	728.0	732.4	735.4	737.6	735.4
137.5°	757.7	763.6	765.1	768.8	767.3
140°	787.3	791.8	794.0	797.0	795.5
142.5°	814.8	819.2	821.5	823.7	821.5
145°	840.0	845.2	846.7	848.2	848.2
147.5°	864.5	868.2	869.7	871.2	867.5
150°	886.8	889.0	890.5	892.0	889.7
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)