

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: P1031527

Luminaire Tested: S123DIW-B1165D755UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031527
REPORT IS A COMBINATION OF REPORTS P991120 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-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

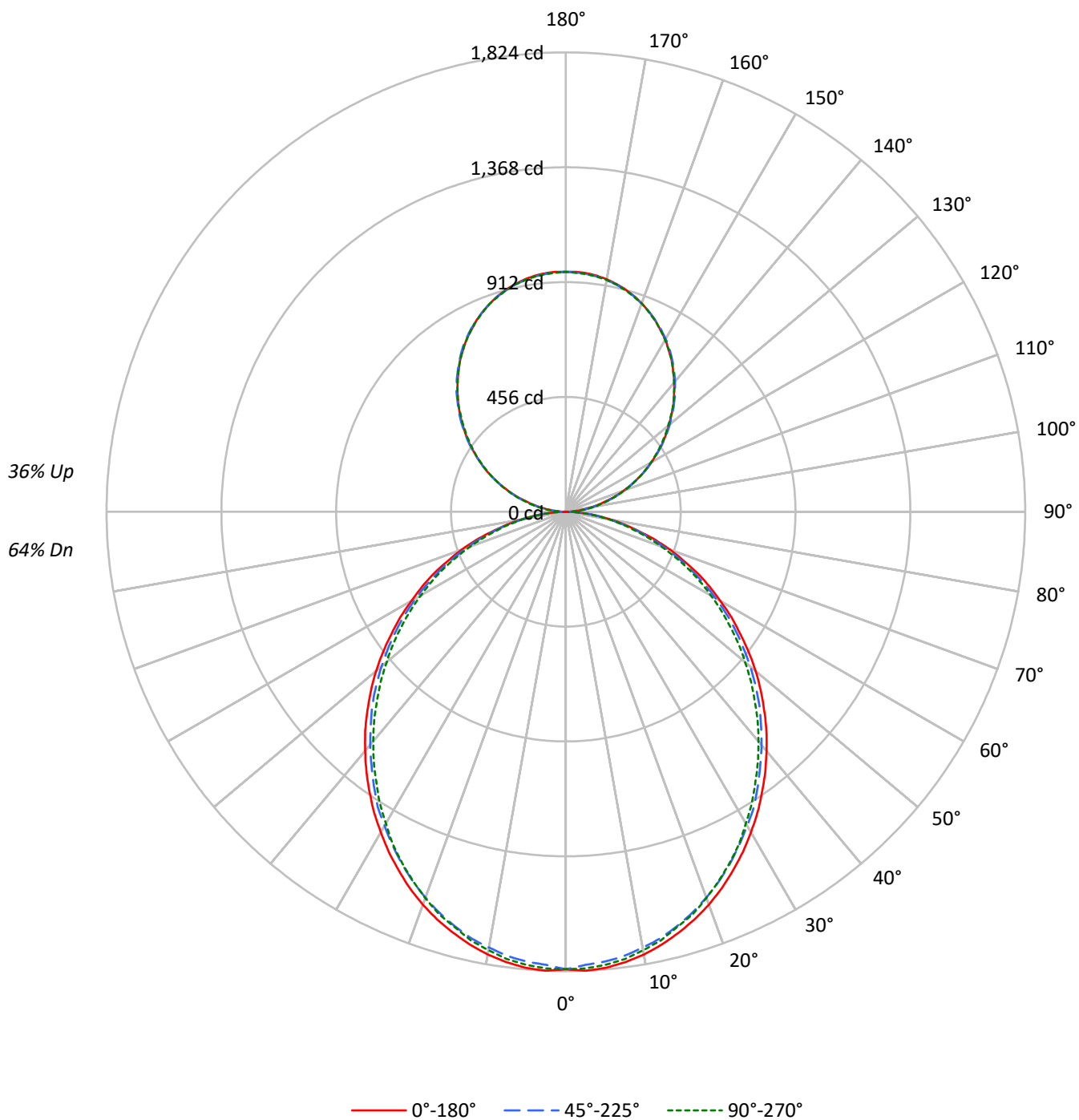
Lumens per Lamp: N/A
Luminaire Lumens: 7369.0 lumens
Efficiency: N/A
Efficacy: 87.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 84.5
Input Voltage (V):
Input Current (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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69
1	101	96	92	89	95	91	87	84	80	77	75	70	68	66	61	60	58
2	92	84	78	73	86	79	74	69	70	66	62	62	58	55	54	51	49
3	84	74	66	60	78	70	63	58	62	56	52	54	50	47	48	44	42
4	77	66	57	51	72	62	55	49	55	49	44	48	44	40	42	39	36
5	70	58	50	44	66	55	48	42	49	43	38	44	39	35	38	34	31
6	65	53	44	38	61	50	42	37	44	38	34	39	34	31	35	31	28
7	60	48	39	34	56	45	38	32	40	34	30	36	31	27	32	28	25
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	29	25	22
9	52	40	32	27	49	38	30	26	34	28	24	30	25	22	27	23	20
10	49	36	29	24	46	35	28	23	31	25	21	28	23	20	25	21	18

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.2	2.3
10°-20°	483.5	6.6
20°-30°	714.1	9.7
30°-40°	834.0	11.3
40°-50°	838.4	11.4
50°-60°	736.5	10.0
60°-70°	548.5	7.4
70°-80°	312.1	4.2
80°-90°	90.8	1.2
90°-100°	61.3	0.8
100°-110°	185.6	2.5
110°-120°	316.0	4.3
120°-130°	415.8	5.6
130°-140°	467.3	6.3
140°-150°	459.4	6.2
150°-160°	386.8	5.2
160°-170°	257.5	3.5
170°-180°	90.2	1.2
0°-30°	1368.8	18.6
0°-40°	2202.7	29.9
0°-60°	3777.6	51.3
0°-90°	4729.0	64.2
90°-120°	563.0	7.6
90°-150°	1905.5	25.9
90°-180°	2640.0	35.8
0°-180°	7369.0	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	9
95°	44	49	55	58	58	49
105°	168	170	177	177	178	180
115°	318	320	319	320	319	315
125°	466	468	466	463	460	415
135°	604	608	608	605	603	465
145°	733	734	736	736	733	458
155°	839	839	840	843	838	386
165°	914	912	912	916	911	258
175°	950	948	948	952	947	90
180°	953	953	953	953	953	

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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	18.0	21.0	22.5
92.5°	22.5	26.9	31.4	33.7	32.2
95°	44.2	49.4	55.4	58.4	58.4
97.5°	72.6	76.3	80.8	84.6	83.8
100°	101.8	106.3	110.0	112.3	113.8
102.5°	135.5	137.7	143.0	145.2	144.5
105°	168.4	169.9	176.6	176.6	178.1
107.5°	207.3	208.1	211.1	213.3	212.6
110°	243.2	244.7	246.2	249.2	247.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	280.7	281.4	281.4	285.2	285.2
115°	318.1	320.3	318.8	319.6	318.8
117.5°	356.3	357.0	355.5	355.5	353.3
120°	391.4	395.9	392.2	391.4	389.9
122.5°	428.1	431.1	429.6	427.4	425.1
125°	465.5	467.8	466.3	463.3	460.3
127.5°	500.0	504.5	503.0	498.5	495.5
130°	534.4	540.4	538.1	535.1	529.9
132.5°	568.8	574.8	573.3	569.6	565.8
135°	604.0	608.5	607.7	604.8	603.3
137.5°	636.2	639.9	642.2	638.4	636.2
140°	669.9	673.6	674.4	673.6	668.4
142.5°	700.6	704.3	705.8	705.0	701.3
145°	732.7	734.2	736.5	735.7	732.7
147.5°	760.4	763.4	765.7	765.7	761.2
150°	789.6	791.1	792.6	792.6	788.1
152.5°	813.6	815.8	816.6	818.1	814.3
155°	839.0	839.0	839.8	842.8	837.5
157.5°	860.7	860.0	860.7	863.7	859.2
160°	880.9	879.4	879.4	883.2	880.2
162.5°	898.9	896.6	897.4	901.1	895.9
165°	913.9	911.6	911.6	916.1	910.9
167.5°	926.6	923.6	924.3	928.8	924.3
170°	937.1	934.1	934.1	939.3	934.1
172.5°	945.3	942.3	942.3	946.8	941.6
175°	950.5	947.5	947.5	952.0	946.8
177.5°	953.5	950.5	950.5	955.0	949.8
180°	952.8	952.8	952.8	952.8	952.8

(END OF REPORT)