

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: P1031413

Luminaire Tested: S123DIW-B1165D1030UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031413
REPORT IS A COMBINATION OF REPORTS P990856 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D1030UB27-4F0-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

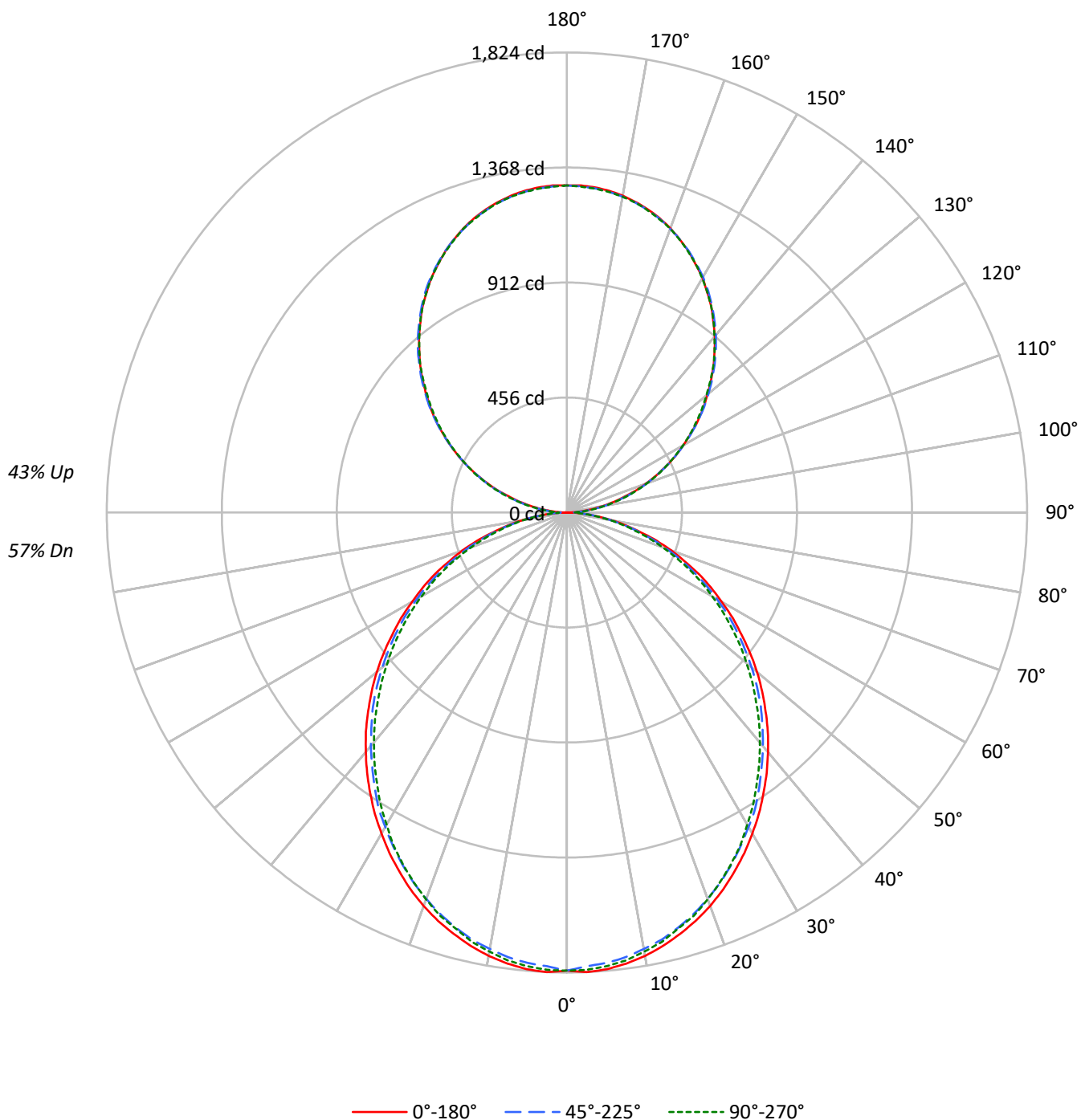
Lumens per Lamp: N/A
Luminaire Lumens: 8323.0 lumens
Efficiency: N/A
Efficacy: 89.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 92.8
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

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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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	99	95	91	87	92	88	85	82	76	74	71	65	63	62	55	54	53
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44
3	82	73	65	59	76	68	61	56	59	54	50	51	47	44	43	40	38
4	75	64	56	50	70	60	53	48	52	47	42	45	41	37	38	35	32
5	69	57	49	43	64	54	46	41	47	41	37	40	36	32	35	31	28
6	64	52	43	37	59	48	41	36	42	36	32	37	32	28	31	28	25
7	59	47	38	33	55	44	36	31	38	32	28	33	29	25	29	25	22
8	55	42	34	29	51	40	33	28	35	29	25	30	26	22	26	23	20
9	51	39	31	26	47	36	29	25	32	26	22	28	23	20	24	21	18
10	48	35	28	23	44	33	27	22	30	24	20	26	21	18	23	19	16

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	2.1
10°-20°	483.5	5.8
20°-30°	714.1	8.6
30°-40°	834.0	10.0
40°-50°	838.4	10.1
50°-60°	736.5	8.8
60°-70°	548.5	6.6
70°-80°	312.1	3.8
80°-90°	91.5	1.1
90°-100°	83.5	1.0
100°-110°	252.7	3.0
110°-120°	430.1	5.2
120°-130°	565.9	6.8
130°-140°	636.1	7.6
140°-150°	625.3	7.5
150°-160°	526.5	6.3
160°-170°	350.5	4.2
170°-180°	122.7	1.5
0°-30°	1368.8	16.4
0°-40°	2202.7	26.5
0°-60°	3777.6	45.4
0°-90°	4729.8	56.8
90°-120°	766.3	9.2
90°-150°	2593.6	31.2
90°-180°	3593.0	43.2
0°-180°	8323.0	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	11	24	28	31	10
95°	60	67	75	80	80	66
105°	229	231	240	240	242	245
115°	433	436	434	435	434	428
125°	634	637	635	631	626	565
135°	822	828	827	823	821	633
145°	997	999	1002	1001	997	623
155°	1142	1142	1143	1147	1140	526
165°	1244	1241	1241	1247	1240	351
175°	1294	1290	1290	1296	1289	123
180°	1297	1297	1297	1297	1297	

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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°	1.0	11.2	24.4	28.5	30.6
92.5°	30.6	36.7	42.8	45.8	43.8
95°	60.1	67.2	75.4	79.5	79.5
97.5°	98.8	103.9	110.0	115.1	114.1
100°	138.5	144.7	149.8	152.8	154.8
102.5°	184.4	187.4	194.6	197.6	196.6
105°	229.2	231.2	240.4	240.4	242.5
107.5°	282.2	283.2	287.3	290.3	289.3
110°	331.1	333.1	335.2	339.2	337.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	382.0	383.0	383.0	388.1	388.1
115°	433.0	436.0	434.0	435.0	434.0
117.5°	484.9	485.9	483.9	483.9	480.8
120°	532.8	538.9	533.8	532.8	530.7
122.5°	582.7	586.8	584.7	581.7	578.6
125°	633.6	636.7	634.7	630.6	626.5
127.5°	680.5	686.6	684.6	678.5	674.4
130°	727.4	735.5	732.5	728.4	721.2
132.5°	774.2	782.4	780.3	775.2	770.1
135°	822.1	828.2	827.2	823.1	821.1
137.5°	865.9	871.0	874.1	869.0	865.9
140°	911.7	916.8	917.9	916.8	909.7
142.5°	953.5	958.6	960.6	959.6	954.5
145°	997.3	999.4	1002.4	1001.4	997.3
147.5°	1035.0	1039.1	1042.1	1042.1	1036.0
150°	1074.7	1076.8	1078.8	1078.8	1072.7
152.5°	1107.3	1110.4	1111.4	1113.5	1108.4
155°	1142.0	1142.0	1143.0	1147.1	1139.9
157.5°	1171.5	1170.5	1171.5	1175.6	1169.5
160°	1199.0	1197.0	1197.0	1202.1	1198.0
162.5°	1223.5	1220.4	1221.4	1226.5	1219.4
165°	1243.8	1240.8	1240.8	1246.9	1239.8
167.5°	1261.2	1257.1	1258.1	1264.2	1258.1
170°	1275.4	1271.4	1271.4	1278.5	1271.4
172.5°	1286.6	1282.6	1282.6	1288.7	1281.5
175°	1293.8	1289.7	1289.7	1295.8	1288.7
177.5°	1297.8	1293.8	1293.8	1299.9	1292.7
180°	1296.8	1296.8	1296.8	1296.8	1296.8

(END OF REPORT)