

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: P1031412

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031412
REPORT IS A COMBINATION OF REPORTS P990855 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-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

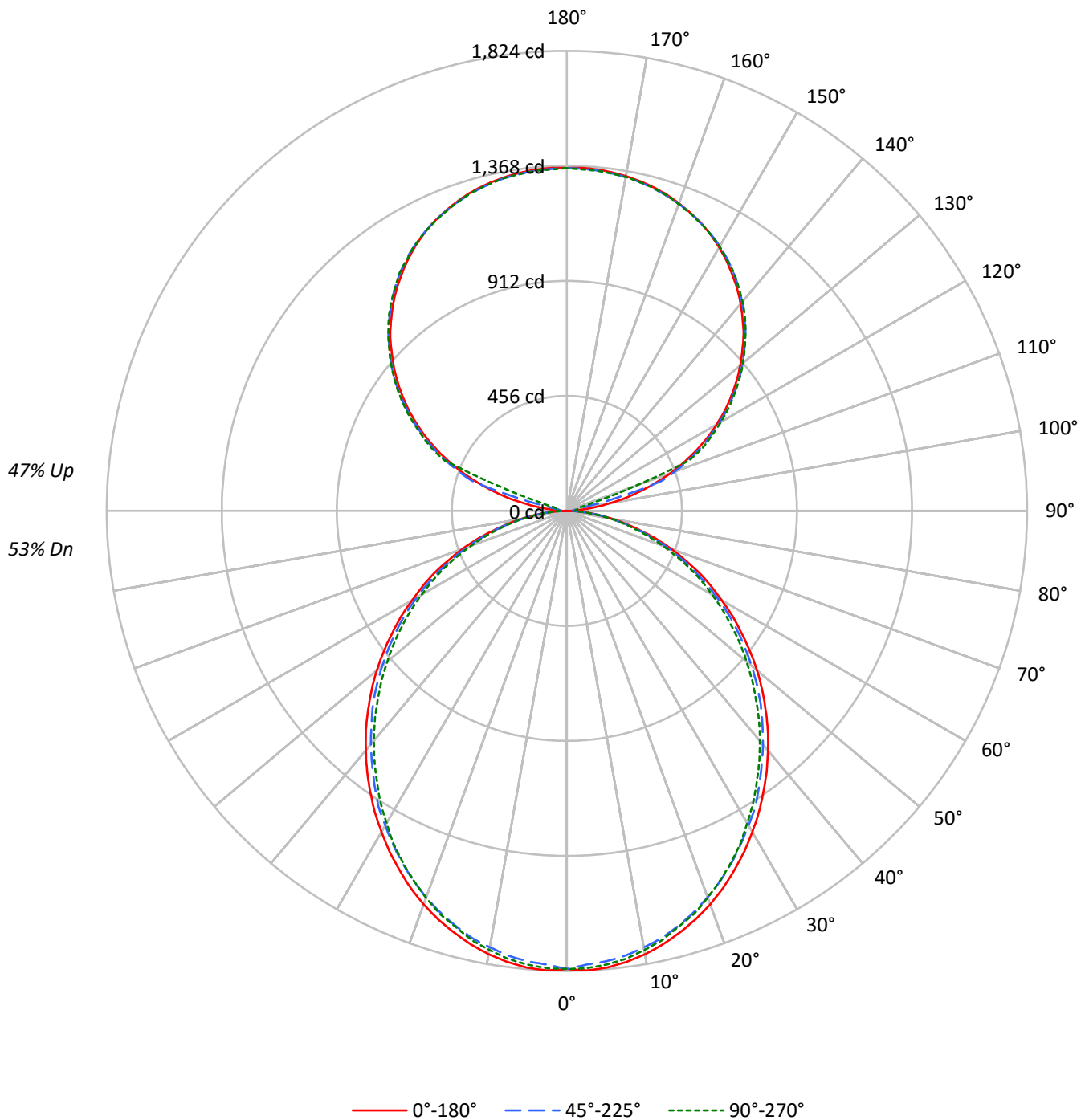
Lumens per Lamp: N/A
Luminaire Lumens: 8874.0 lumens
Efficiency: N/A
Efficacy: 95.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1031412

CATALOG NUMBER: S123DIW-B1165D1030UB27-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1031412

CATALOG NUMBER: S123DIW-B1165D1030UB27-4F0-XX-W2A-F

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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59
1	98	94	90	87	91	87	84	81	75	72	70	63	61	60	52	51	50
2	90	82	76	71	83	76	71	66	65	61	58	55	52	50	46	44	42
3	82	72	65	59	75	67	61	55	58	53	49	49	45	42	41	38	36
4	75	64	56	50	69	59	52	47	51	46	41	43	39	36	36	33	31
5	69	57	49	43	63	53	46	40	46	40	36	39	35	31	33	29	27
6	63	51	43	37	58	48	40	35	41	35	31	35	31	27	30	26	24
7	58	46	38	32	54	43	36	31	37	32	27	32	28	24	27	24	21
8	54	42	34	29	50	39	32	27	34	28	24	29	25	22	25	21	19
9	51	38	31	26	47	36	29	24	31	26	22	27	23	19	23	19	17
10	47	35	28	23	44	33	26	22	29	23	20	25	21	18	21	18	15

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: P1031412

CATALOG NUMBER: S123DIW-B1165D1030UB27-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.2	1.9
10°-20°	483.5	5.4
20°-30°	714.1	8.0
30°-40°	834.0	9.4
40°-50°	838.4	9.4
50°-60°	736.5	8.3
60°-70°	548.5	6.2
70°-80°	312.1	3.5
80°-90°	91.5	1.0
90°-100°	47.9	0.5
100°-110°	231.8	2.6
110°-120°	568.0	6.4
120°-130°	721.0	8.1
130°-140°	770.3	8.7
140°-150°	720.3	8.1
150°-160°	581.0	6.5
160°-170°	374.9	4.2
170°-180°	129.2	1.5
0°-30°	1368.8	15.4
0°-40°	2202.7	24.8
0°-60°	3777.6	42.6
0°-90°	4729.7	53.3
90°-120°	847.7	9.6
90°-150°	3059.2	34.5
90°-180°	4144.0	46.7
0°-180°	8874.0	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	30	9
95°	62	20	31	38	38	74
105°	301	312	221	42	44	319
115°	565	571	580	590	594	558
125°	796	804	808	810	812	711
135°	991	997	1001	1004	1001	763
145°	1143	1150	1152	1154	1154	716
155°	1259	1257	1258	1264	1257	580
165°	1328	1325	1324	1332	1325	375
175°	1359	1354	1355	1362	1354	129
180°	1359	1359	1359	1359	1359	

TEST NUMBER: P1031412

CATALOG NUMBER: S123DIW-B1165D1030UB27-4F0-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°	1.0	11.1	24.2	28.3	30.3
92.5°	23.2	17.2	26.3	33.3	34.3
95°	61.6	20.2	31.3	38.4	38.4
97.5°	112.1	83.8	32.3	40.4	41.4
100°	170.7	190.9	33.3	41.4	42.4
102.5°	237.3	250.5	74.7	41.4	43.4
105°	301.0	312.1	221.2	42.4	44.4
107.5°	368.6	377.7	392.9	237.3	105.0
110°	436.3	444.4	455.5	422.2	277.7

TEST NUMBER: P1031412

CATALOG NUMBER: S123DIW-B1165D1030UB27-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	500.9	508.0	519.1	528.2	526.2
115°	564.6	570.6	579.7	589.8	593.9
117.5°	627.2	634.3	639.3	647.4	648.4
120°	684.8	693.8	696.9	705.0	705.0
122.5°	743.3	750.4	754.4	759.5	760.5
125°	795.9	803.9	808.0	810.0	812.0
127.5°	848.4	856.5	861.5	864.5	862.5
130°	896.8	904.9	909.0	913.0	911.0
132.5°	943.3	951.4	954.4	958.5	955.4
135°	990.8	996.8	1000.9	1003.9	1000.9
137.5°	1031.2	1039.3	1041.3	1046.3	1044.3
140°	1071.6	1077.6	1080.7	1084.7	1082.7
142.5°	1108.9	1115.0	1118.0	1121.1	1118.0
145°	1143.3	1150.4	1152.4	1154.4	1154.4
147.5°	1176.6	1181.7	1183.7	1185.7	1180.6
150°	1206.9	1209.9	1212.0	1214.0	1210.9
152.5°	1234.2	1235.2	1236.2	1240.2	1235.2
155°	1259.4	1257.4	1258.4	1263.5	1257.4
157.5°	1279.6	1279.6	1278.6	1284.7	1276.6
160°	1297.8	1296.8	1295.8	1301.8	1294.8
162.5°	1315.0	1311.9	1310.9	1318.0	1311.9
165°	1328.1	1325.1	1324.1	1332.1	1325.1
167.5°	1339.2	1335.2	1335.2	1343.3	1335.2
170°	1348.3	1344.3	1344.3	1352.3	1344.3
172.5°	1354.4	1349.3	1350.3	1358.4	1349.3
175°	1359.4	1354.4	1355.4	1362.4	1354.4
177.5°	1361.4	1356.4	1357.4	1365.5	1355.4
180°	1359.4	1359.4	1359.4	1359.4	1359.4

(END OF REPORT)