

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: P1012376

Luminaire Tested: S123RDIP-B1165D585UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012376
REPORT IS A COMBINATION OF REPORTS P993077 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B1165D585UB50-4F0-XX-W2A-F1
Description: Define 3 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

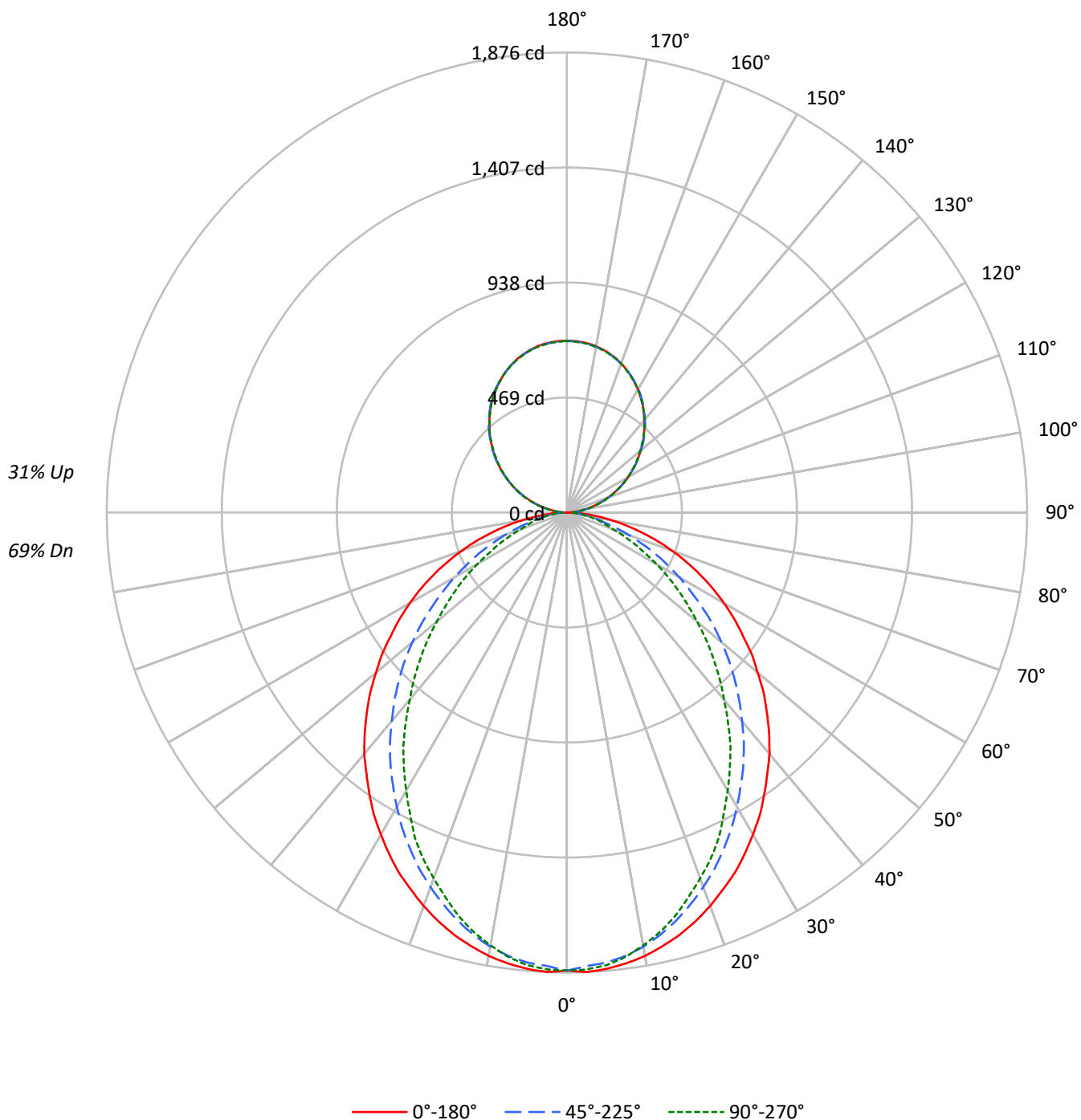
Lumens per Lamp: N/A
Luminaire Lumens: 6160.0 lumens
Efficiency: N/A
Efficacy: 80.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 76.7
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: P1012376

CATALOG NUMBER: S123RDIP-B1165D585UB50-4F0-XX-W2A-F1

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	112	112	112	112	105	105	105	105	94	94	94	83	83	83	73	73	73
1	102	98	94	91	97	93	89	86	83	80	78	74	72	70	65	64	63
2	94	86	80	75	88	82	76	72	73	69	65	65	62	59	58	56	54
3	86	76	69	63	81	72	66	60	65	60	55	58	54	51	52	49	46
4	79	68	60	54	74	64	57	52	58	52	48	52	48	44	47	43	40
5	72	61	53	47	68	58	50	45	52	46	42	47	42	38	42	38	35
6	67	55	47	41	63	52	45	39	47	41	37	43	38	34	38	34	31
7	62	50	42	36	59	47	40	35	43	37	32	39	34	30	35	31	28
8	58	45	37	32	55	43	36	31	39	33	29	36	31	27	32	28	25
9	54	42	34	29	51	40	33	28	36	30	26	33	28	24	30	26	23
10	51	38	31	26	48	37	30	25	34	28	24	31	26	22	28	24	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20106	20106	20106
5°	20139	19395	19343
10°	19980	18665	18298
15°	19721	17764	17154
20°	19381	16784	15875
25°	19030	15765	14664
30°	18581	14682	13231
35°	18116	13618	11928
40°	17681	12462	10487
45°	17122	11332	9191
50°	16505	10124	7851
55°	15865	8832	6623
60°	15255	7507	5376
65°	14465	6147	4195
70°	13473	4649	2999
75°	12043	3148	2376
80°	10282	2187	1667
85°	7713	1181	873

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17122 cd/sqm

TEST NUMBER: P1012376

CATALOG NUMBER: S123RDIP-B1165D585UB50-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.6	2.9
10°-20°	488.5	7.9
20°-30°	703.3	11.4
30°-40°	792.1	12.9
40°-50°	757.6	12.3
50°-60°	620.2	10.1
60°-70°	418.1	6.8
70°-80°	209.7	3.4
80°-90°	56.3	0.9
90°-100°	45.0	0.7
100°-110°	136.3	2.2
110°-120°	232.1	3.8
120°-130°	305.3	5.0
130°-140°	343.2	5.6
140°-150°	337.4	5.5
150°-160°	284.0	4.6
160°-170°	189.1	3.1
170°-180°	66.2	1.1
0°-30°	1367.4	22.2
0°-40°	2159.5	35.1
0°-60°	3537.3	57.4
0°-90°	4221.5	68.5
90°-120°	413.4	6.7
90°-150°	1399.2	22.7
90°-180°	1939.0	31.5
0°-180°	6160.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1868	1868	1868	1868	1868	
5°	1868	1860	1842	1856	1853	177
15°	1782	1765	1722	1715	1704	502
25°	1621	1583	1513	1482	1465	746
35°	1403	1348	1254	1189	1162	878
45°	1153	1085	968	882	845	890
55°	876	801	673	585	554	785
65°	598	515	397	323	306	592
75°	317	244	161	145	142	337
85°	80	47	42	39	39	88
90°	0	6	13	15	16	7
95°	32	36	41	43	43	36
105°	124	125	130	130	131	132
115°	234	235	234	235	234	231
125°	342	344	342	340	338	305
135°	444	447	446	444	443	342
145°	538	539	541	540	538	336
155°	616	616	617	619	615	284
165°	671	669	669	673	669	189
175°	698	696	696	699	695	66
180°	700	700	700	700	700	

TEST NUMBER: P1012376

CATALOG NUMBER: S123RDIP-B1165D585UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1867.9	1867.9	1867.9	1867.9	1867.9
2.5°	1875.5	1869.5	1851.3	1867.9	1864.9
5°	1867.9	1860.4	1842.2	1855.8	1852.8
7.5°	1854.3	1846.7	1824.0	1833.1	1828.5
10°	1836.1	1825.5	1798.2	1799.8	1792.2
12.5°	1810.4	1798.2	1763.4	1761.9	1752.8
15°	1781.6	1764.9	1722.5	1714.9	1704.3
17.5°	1746.7	1728.6	1675.5	1660.4	1645.2
20°	1707.4	1683.1	1625.5	1605.8	1587.7
22.5°	1663.4	1634.6	1572.5	1546.8	1530.1
25°	1621.0	1583.1	1513.4	1481.6	1465.0
27.5°	1569.5	1528.6	1452.8	1410.4	1384.7
30°	1516.5	1471.0	1386.2	1334.7	1310.4
32.5°	1463.4	1410.4	1319.5	1262.0	1236.2
35°	1402.8	1348.3	1254.4	1189.2	1162.0
37.5°	1342.2	1283.2	1184.7	1112.0	1078.6
40°	1284.7	1218.0	1110.5	1031.7	996.8
42.5°	1219.5	1152.9	1040.8	952.9	922.6
45°	1152.9	1084.7	968.1	881.7	845.3
47.5°	1087.7	1012.0	896.9	802.9	771.1
50°	1015.0	943.8	821.1	727.2	692.3
52.5°	949.9	871.1	749.9	651.4	621.1
55°	875.6	801.4	672.6	584.8	554.5
57.5°	809.0	728.7	598.4	515.1	489.3
60°	739.3	656.0	530.2	448.4	422.7
62.5°	669.6	586.3	460.5	384.8	357.5
65°	598.4	515.1	396.9	322.7	306.0
67.5°	527.2	442.4	327.2	271.2	253.0
70°	457.5	375.7	269.7	216.6	200.0
72.5°	387.8	307.5	213.6	172.7	168.2
75°	316.6	243.9	160.6	145.4	142.4
77.5°	251.5	184.8	125.7	116.7	113.6
80°	189.4	127.3	95.4	90.9	87.9
82.5°	130.3	78.8	68.2	63.6	63.6
85°	80.3	47.0	42.4	39.4	39.4
87.5°	36.4	19.7	19.7	18.2	16.7
90°	0.5	6.0	13.2	15.4	16.5
92.5°	16.5	19.8	23.1	24.7	23.6
95°	32.4	36.3	40.7	42.9	42.9
97.5°	53.3	56.1	59.4	62.1	61.6
100°	74.7	78.0	80.8	82.4	83.5
102.5°	99.5	101.1	105.0	106.6	106.1
105°	123.7	124.8	129.7	129.7	130.8
107.5°	152.2	152.8	155.0	156.6	156.1
110°	178.6	179.7	180.8	183.0	181.9



TEST NUMBER: P1012376

CATALOG NUMBER: S123RDIP-B1165D585UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	206.1	206.6	206.6	209.4	209.4
115°	233.6	235.2	234.1	234.7	234.1
117.5°	261.6	262.2	261.1	261.1	259.4
120°	287.4	290.7	288.0	287.4	286.3
122.5°	314.4	316.6	315.5	313.8	312.2
125°	341.8	343.5	342.4	340.2	338.0
127.5°	367.1	370.4	369.3	366.0	363.8
130°	392.4	396.8	395.2	393.0	389.1
132.5°	417.7	422.1	421.0	418.2	415.5
135°	443.5	446.8	446.3	444.1	443.0
137.5°	467.1	469.9	471.5	468.8	467.1
140°	491.9	494.6	495.2	494.6	490.8
142.5°	514.4	517.2	518.3	517.7	515.0
145°	538.0	539.1	540.8	540.2	538.0
147.5°	558.4	560.6	562.2	562.2	558.9
150°	579.8	580.9	582.0	582.0	578.7
152.5°	597.4	599.0	599.6	600.7	597.9
155°	616.1	616.1	616.6	618.8	615.0
157.5°	632.0	631.5	632.0	634.2	630.9
160°	646.9	645.8	645.8	648.5	646.3
162.5°	660.1	658.4	659.0	661.7	657.9
165°	671.0	669.4	669.4	672.7	668.8
167.5°	680.4	678.2	678.7	682.0	678.7
170°	688.1	685.9	685.9	689.7	685.9
172.5°	694.1	691.9	691.9	695.2	691.4
175°	698.0	695.8	695.8	699.1	695.2
177.5°	700.2	698.0	698.0	701.3	697.4
180°	699.6	699.6	699.6	699.6	699.6

(END OF REPORT)