

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: P1012289

Luminaire Tested: S123RDIP-B1165D1025UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012289
REPORT IS A COMBINATION OF REPORTS P992958 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B1165D1025UB50-4F0-XX-W2A-F4
Description: Define 3 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

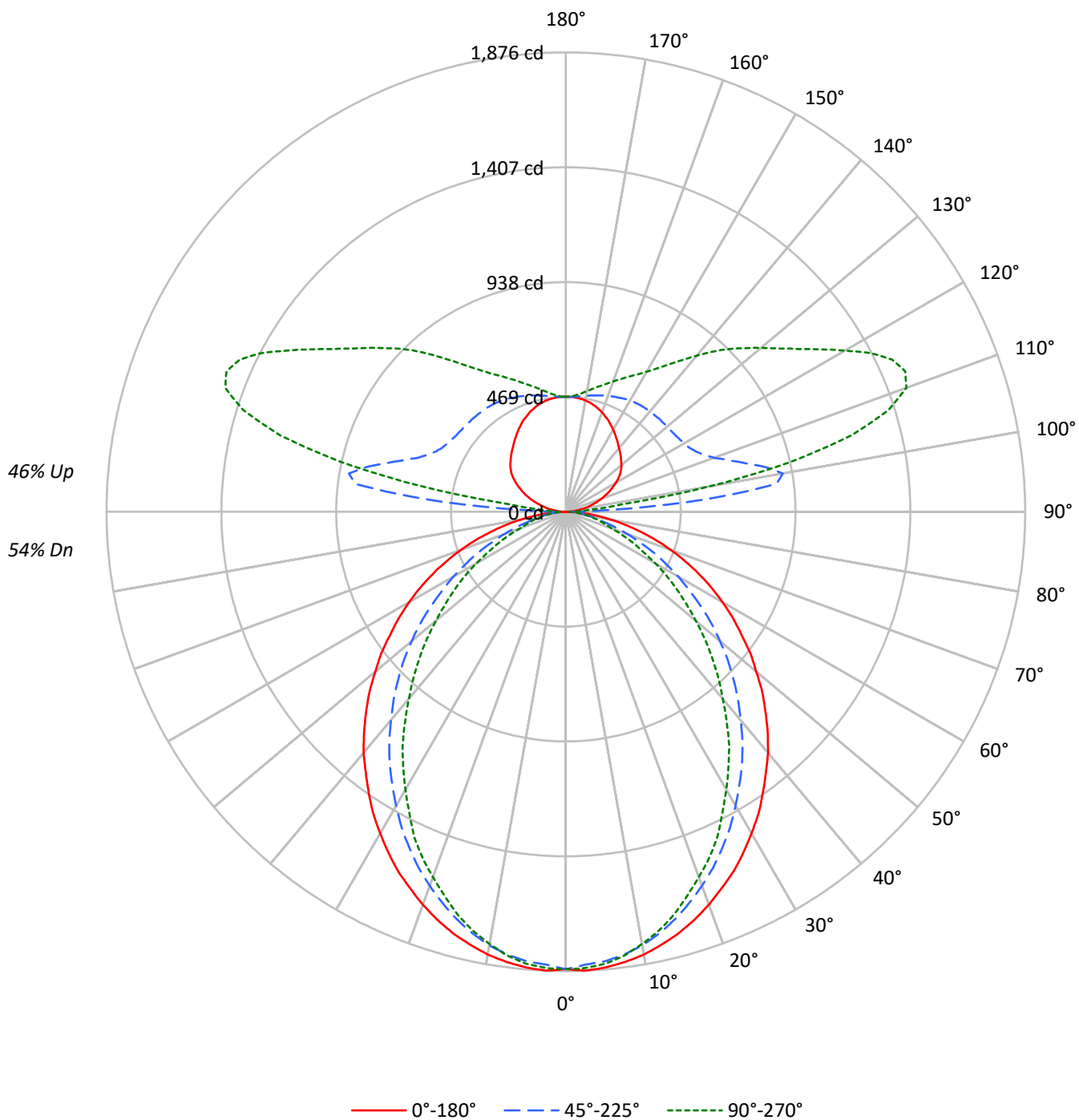
Lumens per Lamp: N/A
Luminaire Lumens: 7761.2 lumens
Efficiency: N/A
Efficacy: 86.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 89.8
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: P1012289

CATALOG NUMBER: S123RDIP-B1165D1025UB50-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P1012289

CATALOG NUMBER: S123RDIP-B1165D1025UB50-4F0-XX-W2A-F4

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	86	86	86	72	72	72	60	60	60
1	99	95	91	88	92	88	85	82	76	73	71	64	63	61	54	53	52
2	91	83	77	72	84	78	72	68	67	63	60	57	54	52	48	46	44
3	83	74	66	61	77	69	62	57	59	54	50	51	47	44	43	40	38
4	76	65	58	52	70	61	54	49	53	48	43	45	41	38	38	35	33
5	70	58	50	44	65	55	47	42	47	42	38	41	37	33	35	31	29
6	64	52	44	39	60	49	42	37	43	37	33	37	33	29	32	28	26
7	60	48	40	34	55	45	37	32	39	33	29	34	29	26	29	25	23
8	55	43	36	30	51	41	34	29	36	30	26	31	27	23	27	23	21
9	52	40	32	27	48	37	30	26	33	27	23	29	24	21	25	21	19
10	48	36	29	24	45	34	28	23	30	25	21	26	22	19	23	19	17

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: P1012289

CATALOG NUMBER: S123RDIP-B1165D1025UB50-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.6	2.3
10°-20°	488.5	6.3
20°-30°	703.3	9.1
30°-40°	792.1	10.2
40°-50°	757.6	9.8
50°-60°	620.2	8.0
60°-70°	418.1	5.4
70°-80°	209.7	2.7
80°-90°	57.5	0.7
90°-100°	266.7	3.4
100°-110°	745.5	9.6
110°-120°	726.9	9.4
120°-130°	578.8	7.5
130°-140°	456.9	5.9
140°-150°	340.9	4.4
150°-160°	237.8	3.1
160°-170°	139.7	1.8
170°-180°	45.4	0.6
0°-30°	1367.4	17.6
0°-40°	2159.5	27.8
0°-60°	3537.3	45.6
0°-90°	4222.6	54.4
90°-120°	1739.1	22.4
90°-150°	3115.7	40.1
90°-180°	3539.0	45.6
0°-180°	7761.2	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°	2	11	24	27	28	7
95°	32	105	563	164	110	34
105°	110	163	764	1336	1208	117
115°	195	243	584	1281	1470	193
125°	271	320	545	988	1159	241
135°	317	379	538	814	940	245
145°	362	415	531	667	734	227
155°	411	444	514	584	609	189
165°	449	462	492	522	531	127
175°	468	469	472	479	478	44
180°	469	469	469	469	469	

TEST NUMBER: P1012289

CATALOG NUMBER: S123RDIP-B1165D1025UB50-4F0-XX-W2A-F4

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°	1.9	11.4	23.8	26.6	27.6
92.5°	14.3	57.0	176.7	60.4	50.4
95°	32.3	105.0	563.4	164.4	110.2
97.5°	51.3	120.2	866.5	413.2	226.1
100°	70.3	132.6	899.7	864.6	595.7
102.5°	90.3	146.8	838.0	1157.6	943.4
105°	110.2	163.0	763.9	1335.8	1208.5
107.5°	131.1	182.0	698.3	1414.2	1381.4
110°	153.9	201.4	644.2	1416.6	1480.2



TEST NUMBER: P1012289

CATALOG NUMBER: S123RDIP-B1165D1025UB50-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174.8	221.8	608.0	1362.9	1500.2
115°	194.8	242.8	584.3	1281.2	1469.8
117.5°	214.7	262.7	568.1	1193.8	1403.3
120°	235.6	282.6	557.7	1111.1	1315.9
122.5°	253.7	301.6	551.0	1046.0	1234.1
125°	270.8	319.7	545.3	988.1	1159.1
127.5°	284.1	336.8	542.5	940.6	1094.5
130°	296.4	352.0	539.6	896.9	1041.3
132.5°	305.9	365.8	538.7	856.0	989.0
135°	317.3	378.6	537.7	813.8	939.6
137.5°	327.8	389.0	535.8	773.8	887.4
140°	338.2	398.5	534.9	734.9	832.3
142.5°	349.6	407.1	533.0	699.3	781.0
145°	362.0	414.7	531.1	667.4	734.4
147.5°	374.3	422.8	528.2	642.8	694.5
150°	386.7	429.4	524.4	620.8	660.3
152.5°	399.0	436.6	519.7	601.8	631.8
155°	411.4	443.6	514.0	584.3	609.0
157.5°	420.9	449.8	509.2	567.2	587.1
160°	432.3	455.0	503.5	551.5	566.2
162.5°	440.8	458.9	497.8	536.8	547.2
165°	449.4	462.2	492.1	522.0	531.1
167.5°	456.0	465.0	486.4	509.2	514.9
170°	461.7	466.4	480.7	497.8	500.7
172.5°	465.5	467.9	476.0	487.8	487.4
175°	468.4	468.8	472.2	478.8	477.9
177.5°	470.3	469.3	469.3	473.1	471.2
180°	469.3	469.3	469.3	469.3	469.3

(END OF REPORT)