

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: P1012347

Luminaire Tested: S123RDIP-B1165D365UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012347
REPORT IS A COMBINATION OF REPORTS P993036 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B1165D365UB50-4F0-XX-W2A-F
Description: Define 3 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

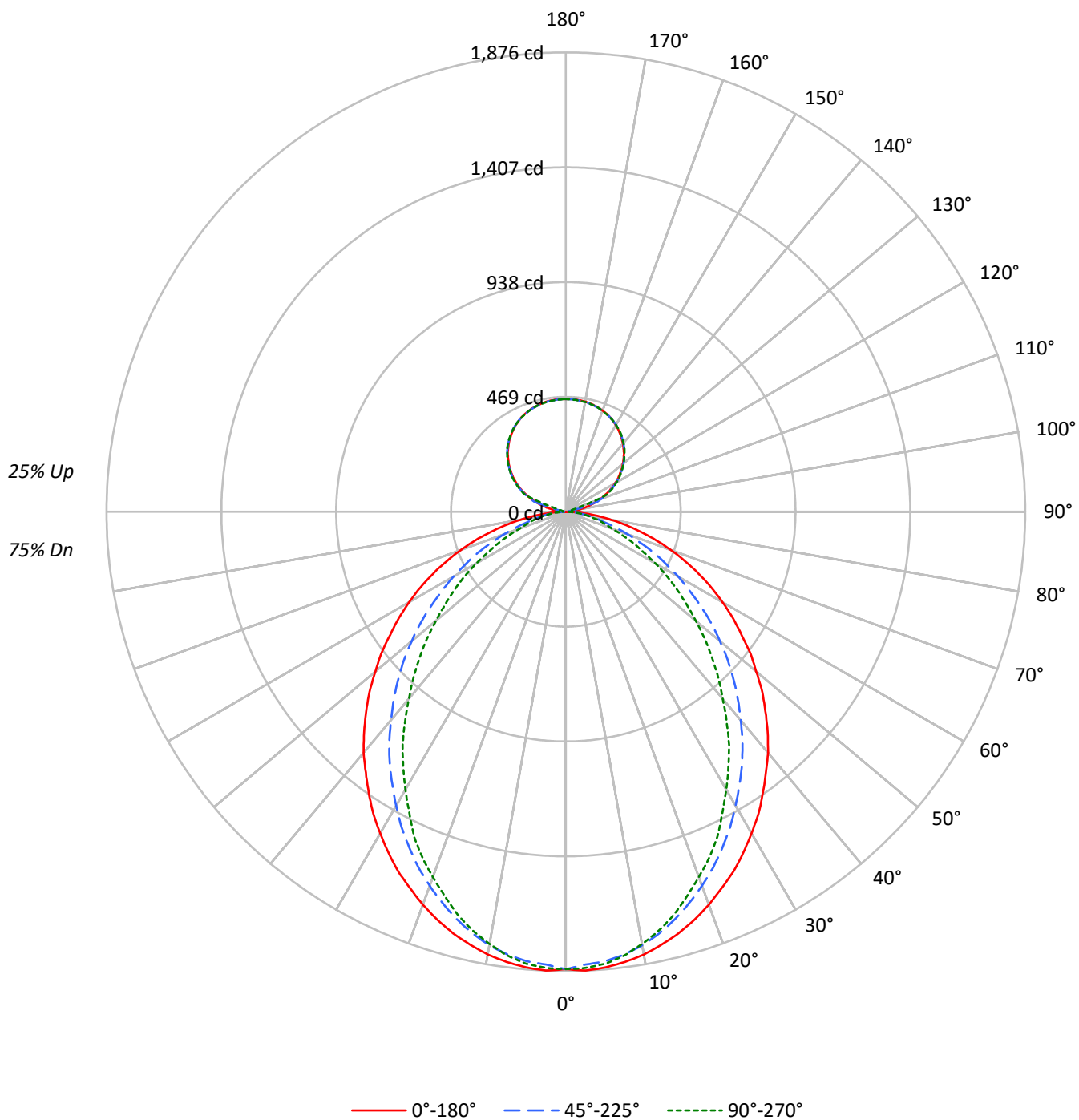
Lumens per Lamp: N/A
Luminaire Lumens: 5624.0 lumens
Efficiency: N/A
Efficacy: 79.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 70.6
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: P1012347

CATALOG NUMBER: S123RDIP-B1165D365UB50-4F0-XX-W2A-F

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	113	113	113	113	108	108	108	108	97	97	97	88	88	88	79	79	79
1	104	100	96	92	99	95	92	88	86	84	81	78	76	74	71	69	68
2	95	88	81	76	90	84	78	73	76	72	68	69	66	63	63	60	58
3	87	77	70	64	83	74	67	62	68	62	58	62	57	54	56	53	50
4	80	69	61	55	76	66	59	53	60	55	50	55	50	47	50	47	43
5	74	62	54	47	70	59	52	46	54	48	43	50	45	41	46	41	38
6	68	56	48	42	65	54	46	40	49	43	38	45	40	36	42	37	34
7	63	51	43	37	60	49	41	36	45	39	34	41	36	32	38	34	30
8	59	46	38	33	56	45	37	32	41	35	30	38	33	29	35	31	27
9	55	42	35	30	52	41	34	29	38	32	27	35	30	26	33	28	25
10	52	39	32	27	49	38	31	26	35	29	25	33	27	24	30	26	23

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: P1012347

CATALOG NUMBER: S123RDIP-B1165D365UB50-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.6	3.1
10°-20°	488.5	8.7
20°-30°	703.3	12.5
30°-40°	792.1	14.1
40°-50°	757.6	13.5
50°-60°	620.2	11.0
60°-70°	418.1	7.4
70°-80°	209.7	3.7
80°-90°	55.8	1.0
90°-100°	16.2	0.3
100°-110°	78.5	1.4
110°-120°	192.3	3.4
120°-130°	244.1	4.3
130°-140°	260.8	4.6
140°-150°	243.8	4.3
150°-160°	196.7	3.5
160°-170°	126.9	2.3
170°-180°	43.7	0.8
0°-30°	1367.4	24.3
0°-40°	2159.5	38.4
0°-60°	3537.3	62.9
0°-90°	4220.9	75.1
90°-120°	287.0	5.1
90°-150°	1035.7	18.4
90°-180°	1403.0	24.9
0°-180°	5624.0	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	4	8	10	10	6
95°	21	7	11	13	13	25
105°	102	106	75	14	15	108
115°	191	193	196	200	201	189
125°	269	272	274	274	275	241
135°	335	338	339	340	339	258
145°	387	390	390	391	391	242
155°	426	426	426	428	426	196
165°	450	449	448	451	449	127
175°	460	458	459	461	458	44
180°	460	460	460	460	460	

TEST NUMBER: P1012347

CATALOG NUMBER: S123RDIP-B1165D365UB50-4F0-XX-W2A-F

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°	0.3	3.8	8.2	9.6	10.3
92.5°	7.9	5.8	8.9	11.3	11.6
95°	20.9	6.8	10.6	13.0	13.0
97.5°	38.0	28.4	10.9	13.7	14.0
100°	57.8	64.6	11.3	14.0	14.4
102.5°	80.4	84.8	25.3	14.0	14.7
105°	101.9	105.7	74.9	14.4	15.0
107.5°	124.8	127.9	133.0	80.4	35.6
110°	147.7	150.4	154.2	142.9	94.0



TEST NUMBER: P1012347

CATALOG NUMBER: S123RDIP-B1165D365UB50-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	169.6	172.0	175.8	178.8	178.1
115°	191.1	193.2	196.3	199.7	201.1
117.5°	212.3	214.7	216.4	219.2	219.5
120°	231.8	234.9	235.9	238.7	238.7
122.5°	251.7	254.1	255.4	257.1	257.5
125°	269.4	272.2	273.5	274.2	274.9
127.5°	287.2	290.0	291.7	292.7	292.0
130°	303.6	306.4	307.7	309.1	308.4
132.5°	319.4	322.1	323.1	324.5	323.5
135°	335.4	337.5	338.9	339.9	338.9
137.5°	349.1	351.8	352.5	354.2	353.6
140°	362.8	364.8	365.9	367.2	366.6
142.5°	375.4	377.5	378.5	379.5	378.5
145°	387.1	389.5	390.1	390.8	390.8
147.5°	398.4	400.1	400.7	401.4	399.7
150°	408.6	409.6	410.3	411.0	410.0
152.5°	417.8	418.2	418.5	419.9	418.2
155°	426.4	425.7	426.0	427.8	425.7
157.5°	433.2	433.2	432.9	434.9	432.2
160°	439.4	439.0	438.7	440.7	438.4
162.5°	445.2	444.2	443.8	446.2	444.2
165°	449.6	448.6	448.3	451.0	448.6
167.5°	453.4	452.0	452.0	454.8	452.0
170°	456.5	455.1	455.1	457.8	455.1
172.5°	458.5	456.8	457.2	459.9	456.8
175°	460.2	458.5	458.9	461.3	458.5
177.5°	460.9	459.2	459.6	462.3	458.9
180°	460.2	460.2	460.2	460.2	460.2

(END OF REPORT)