

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: P1012349

Luminaire Tested: S123RDIP-B1165D365UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012349
REPORT IS A COMBINATION OF REPORTS P993038 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-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

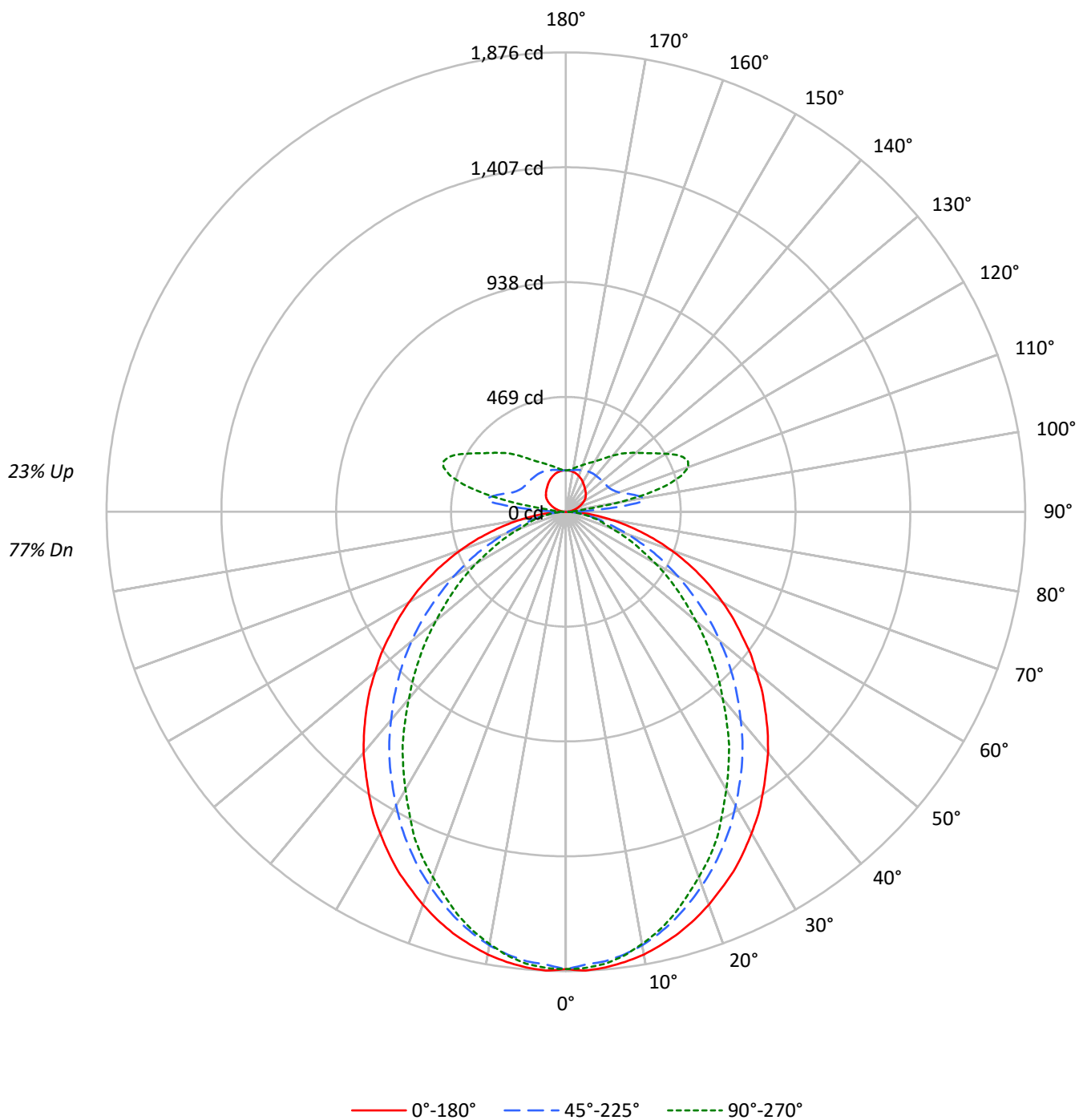
Lumens per Lamp: N/A
Luminaire Lumens: 5494.0 lumens
Efficiency: N/A
Efficacy: 77.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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: P1012349

CATALOG NUMBER: S123RDIP-B1165D365UB50-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P1012349

CATALOG NUMBER: S123RDIP-B1165D365UB50-4F0-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	114	114	114	114	108	108	108	108	98	98	98	89	89	89	81	81	81
1	104	100	96	93	99	96	92	89	87	84	82	79	77	75	72	71	69
2	95	88	82	77	91	84	79	74	77	73	69	70	67	64	64	62	59
3	87	78	70	64	83	75	68	62	68	63	58	63	58	55	57	54	51
4	80	69	61	55	76	66	59	53	61	55	50	56	51	47	52	48	44
5	74	62	54	48	70	60	52	46	55	49	44	51	45	41	47	42	39
6	68	56	48	42	65	54	46	41	50	43	39	46	41	37	43	38	34
7	64	51	43	37	60	49	42	36	45	39	34	42	37	33	39	34	31
8	59	47	39	33	56	45	37	32	42	35	31	39	33	29	36	31	28
9	55	43	35	30	53	41	34	29	38	32	28	36	30	27	33	29	25
10	52	39	32	27	49	38	31	26	36	30	25	33	28	24	31	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: P1012349

CATALOG NUMBER: S123RDIP-B1165D365UB50-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.6	3.2
10°-20°	488.5	8.9
20°-30°	703.3	12.8
30°-40°	792.1	14.4
40°-50°	757.6	13.8
50°-60°	620.2	11.3
60°-70°	418.1	7.6
70°-80°	209.7	3.8
80°-90°	55.8	1.0
90°-100°	95.9	1.7
100°-110°	268.2	4.9
110°-120°	261.5	4.8
120°-130°	208.2	3.8
130°-140°	164.4	3.0
140°-150°	122.6	2.2
150°-160°	85.5	1.6
160°-170°	50.3	0.9
170°-180°	16.3	0.3
0°-30°	1367.4	24.9
0°-40°	2159.5	39.3
0°-60°	3537.3	64.4
0°-90°	4220.9	76.8
90°-120°	625.6	11.4
90°-150°	1120.9	20.4
90°-180°	1273.0	23.2
0°-180°	5494.0	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°	1	4	8	10	10	6
95°	12	38	203	59	40	12
105°	40	59	275	481	435	42
115°	70	87	210	461	529	69
125°	97	115	196	356	417	87
135°	114	136	194	293	338	88
145°	130	149	191	240	264	82
155°	148	160	185	210	219	68
165°	162	166	177	188	191	46
175°	168	169	170	172	172	16
180°	169	169	169	169	169	

TEST NUMBER: P1012349

CATALOG NUMBER: S123RDIP-B1165D365UB50-4F0-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°	0.7	4.1	8.5	9.6	9.9
92.5°	5.1	20.5	63.6	21.7	18.1
95°	11.6	37.8	202.7	59.2	39.6
97.5°	18.5	43.2	311.7	148.7	81.3
100°	25.3	47.6	323.7	311.0	214.3
102.5°	32.5	52.8	301.5	416.4	339.4
105°	39.6	58.6	274.8	480.6	434.8
107.5°	47.2	65.4	251.2	508.8	497.0
110°	55.4	72.4	231.7	509.6	532.5

TEST NUMBER: P1012349

CATALOG NUMBER: S123RDIP-B1165D365UB50-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	62.9	79.8	218.7	490.3	539.7
115°	70.1	87.3	210.2	460.9	528.7
117.5°	77.2	94.5	204.4	429.4	504.8
120°	84.8	101.7	200.6	399.8	473.4
122.5°	91.3	108.5	198.2	376.3	444.0
125°	97.4	115.0	196.2	355.5	417.0
127.5°	102.2	121.2	195.2	338.4	393.7
130°	106.6	126.6	194.1	322.6	374.6
132.5°	110.1	131.6	193.8	308.0	355.8
135°	114.2	136.2	193.5	292.8	338.0
137.5°	117.9	140.0	192.8	278.4	319.2
140°	121.7	143.4	192.4	264.4	299.4
142.5°	125.8	146.4	191.7	251.6	281.0
145°	130.2	149.2	191.1	240.2	264.2
147.5°	134.7	152.1	190.0	231.2	249.8
150°	139.1	154.5	188.7	223.4	237.5
152.5°	143.6	157.0	187.0	216.6	227.3
155°	148.0	159.6	184.9	210.2	219.1
157.5°	151.4	161.8	183.2	204.0	211.2
160°	155.5	163.7	181.1	198.4	203.7
162.5°	158.6	165.1	179.1	193.1	196.9
165°	161.7	166.3	177.0	187.8	191.1
167.5°	164.1	167.4	175.0	183.2	185.3
170°	166.1	167.8	172.9	179.1	180.1
172.5°	167.5	168.4	171.2	175.5	175.3
175°	168.5	168.6	169.9	172.3	171.9
177.5°	169.2	168.8	168.8	170.2	169.5
180°	168.8	168.8	168.8	168.8	168.8

(END OF REPORT)