

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: P1012324

Luminaire Tested: S123RDIP-B1165D365UB27-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012324
REPORT IS A COMBINATION OF REPORTS P993003 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B1165D365UB27-4F0-XX-W2A-F1
Description: Define 3 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

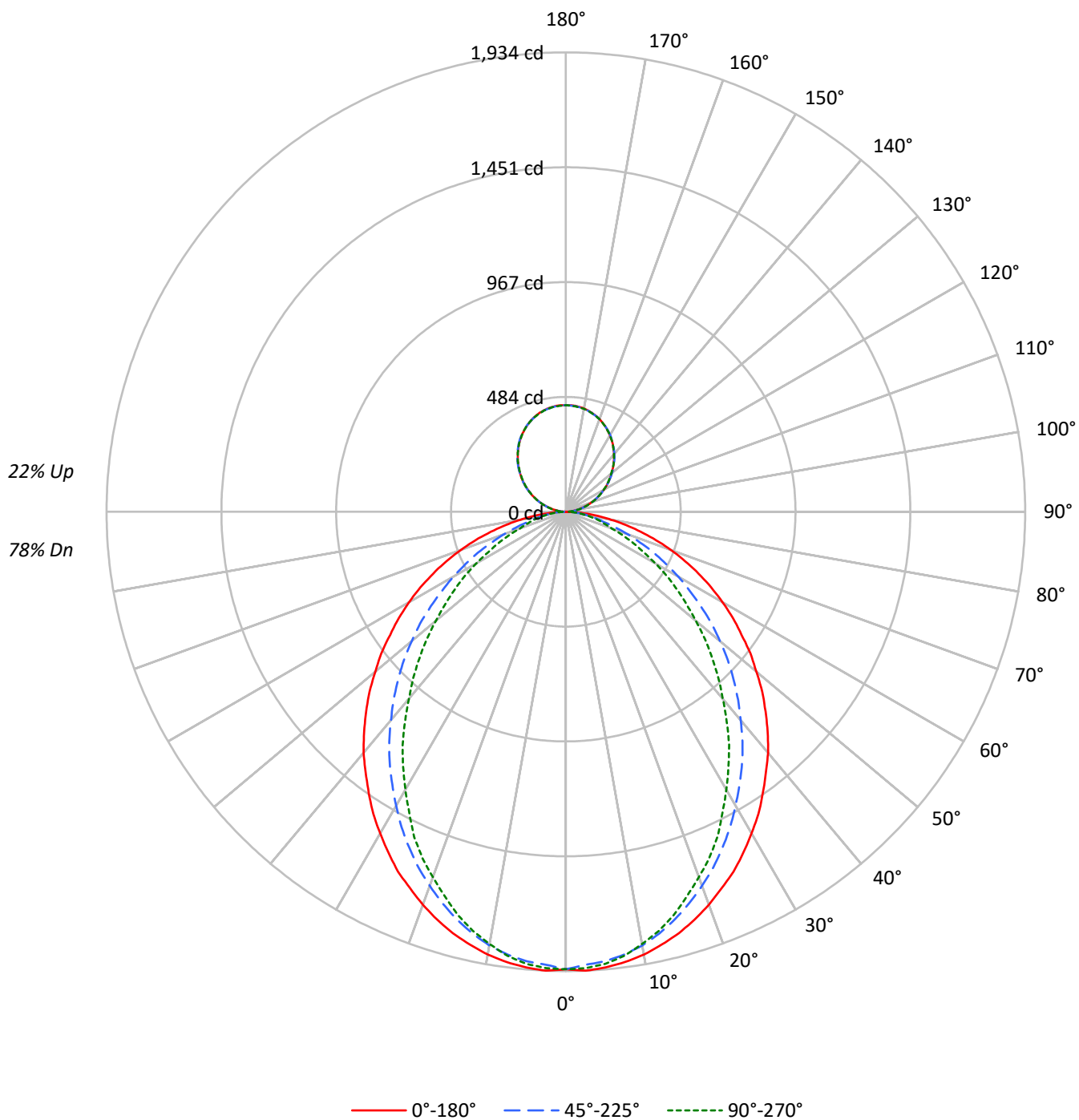
Lumens per Lamp: N/A
Luminaire Lumens: 5595.0 lumens
Efficiency: N/A
Efficacy: 79.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

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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	114	114	114	114	109	109	109	109	99	99	99	90	90	90	82	82	82
1	105	100	96	93	100	96	92	89	88	85	82	80	78	76	73	71	70
2	96	88	82	77	91	84	79	74	77	73	69	71	67	64	65	62	60
3	88	78	71	65	83	75	68	63	69	63	59	63	59	55	58	54	51
4	80	69	61	55	77	67	59	54	61	55	51	57	52	48	52	48	45
5	74	62	54	48	71	60	52	47	55	49	44	51	46	42	47	43	39
6	69	56	48	42	65	54	47	41	50	44	39	46	41	37	43	38	35
7	64	51	43	37	61	49	42	36	46	39	35	42	37	33	39	35	31
8	59	47	39	33	57	45	38	33	42	36	31	39	34	30	36	32	28
9	55	43	35	30	53	41	34	29	39	32	28	36	31	27	34	29	26
10	52	40	32	27	50	38	31	27	36	30	25	33	28	24	31	27	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20730	20730	20730
5°	20764	19997	19943
10°	20601	19245	18866
15°	20334	18316	17686
20°	19983	17305	16368
25°	19621	16255	15119
30°	19156	15137	13642
35°	18679	14040	12298
40°	18230	12848	10813
45°	17654	11683	9477
50°	17017	10438	8094
55°	16358	9106	6828
60°	15727	7740	5542
65°	14915	6338	4325
70°	13891	4792	3092
75°	12420	3246	2449
80°	10597	2255	1718
85°	7953	1217	900

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17654 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.0	3.2
10°-20°	503.7	9.0
20°-30°	725.2	13.0
30°-40°	816.6	14.6
40°-50°	781.2	14.0
50°-60°	639.4	11.4
60°-70°	431.1	7.7
70°-80°	216.2	3.9
80°-90°	57.5	1.0
90°-100°	28.9	0.5
100°-110°	87.4	1.6
110°-120°	148.8	2.7
120°-130°	195.8	3.5
130°-140°	220.0	3.9
140°-150°	216.3	3.9
150°-160°	182.1	3.3
160°-170°	121.2	2.2
170°-180°	42.5	0.8
0°-30°	1409.9	25.2
0°-40°	2226.5	39.8
0°-60°	3647.1	65.2
0°-90°	4351.9	77.8
90°-120°	265.1	4.7
90°-150°	897.2	16.0
90°-180°	1243.0	22.2
0°-180°	5595.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1926	1926	1926	1926	1926	
5°	1926	1918	1899	1913	1910	183
15°	1837	1820	1776	1768	1757	518
25°	1671	1632	1560	1528	1510	769
35°	1446	1390	1293	1226	1198	905
45°	1189	1118	998	909	872	917
55°	903	826	694	603	572	810
65°	617	531	409	333	316	611
75°	326	252	166	150	147	348
85°	83	48	44	41	41	91
90°	0	4	8	10	11	7
95°	21	23	26	28	28	23
105°	79	80	83	83	84	85
115°	150	151	150	150	150	148
125°	219	220	220	218	217	195
135°	284	286	286	285	284	219
145°	345	346	347	346	345	216
155°	395	395	395	397	394	182
165°	430	429	429	431	429	121
175°	448	446	446	448	446	43
180°	449	449	449	449	449	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1925.9	1925.9	1925.9	1925.9	1925.9
2.5°	1933.7	1927.5	1908.7	1925.9	1922.8
5°	1925.9	1918.1	1899.4	1913.4	1910.3
7.5°	1911.9	1904.1	1880.6	1890.0	1885.3
10°	1893.1	1882.2	1854.1	1855.6	1847.8
12.5°	1866.6	1854.1	1818.1	1816.6	1807.2
15°	1836.9	1819.7	1776.0	1768.2	1757.2
17.5°	1801.0	1782.2	1727.6	1711.9	1696.3
20°	1760.4	1735.4	1676.0	1655.7	1637.0
22.5°	1715.1	1685.4	1621.3	1594.8	1577.6
25°	1671.3	1632.3	1560.4	1527.6	1510.4
27.5°	1618.2	1576.0	1497.9	1454.2	1427.7
30°	1563.5	1516.7	1429.2	1376.1	1351.1
32.5°	1508.9	1454.2	1360.5	1301.1	1274.6
35°	1446.4	1390.2	1293.3	1226.2	1198.0
37.5°	1383.9	1323.0	1221.5	1146.5	1112.1
40°	1324.6	1255.8	1144.9	1063.7	1027.8
42.5°	1257.4	1188.7	1073.1	982.5	951.2
45°	1188.7	1118.4	998.1	909.1	871.6
47.5°	1121.5	1043.4	924.7	827.8	795.0
50°	1046.5	973.1	846.6	749.8	713.8
52.5°	979.4	898.1	773.2	671.7	640.4
55°	902.8	826.3	693.5	602.9	571.7
57.5°	834.1	751.3	617.0	531.1	504.5
60°	762.2	676.3	546.7	462.3	435.8
62.5°	690.4	604.5	474.8	396.7	368.6
65°	617.0	531.1	409.2	332.7	315.5
67.5°	543.6	456.1	337.4	279.6	260.9
70°	471.7	387.4	278.0	223.4	206.2
72.5°	399.9	317.1	220.2	178.1	173.4
75°	326.5	251.5	165.6	150.0	146.8
77.5°	259.3	190.6	129.6	120.3	117.1
80°	195.2	131.2	98.4	93.7	90.6
82.5°	134.3	81.2	70.3	65.6	65.6
85°	82.8	48.4	43.7	40.6	40.6
87.5°	37.5	20.3	20.3	18.7	17.2
90°	0.4	3.9	8.5	9.9	10.6
92.5°	10.6	12.7	14.8	15.9	15.2
95°	20.8	23.3	26.1	27.5	27.5
97.5°	34.2	35.9	38.1	39.8	39.5
100°	47.9	50.0	51.8	52.9	53.6
102.5°	63.8	64.8	67.3	68.4	68.0
105°	79.3	80.0	83.2	83.2	83.9
107.5°	97.6	98.0	99.4	100.4	100.1
110°	114.5	115.2	115.9	117.4	116.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	132.2	132.5	132.5	134.3	134.3
115°	149.8	150.8	150.1	150.5	150.1
117.5°	167.7	168.1	167.4	167.4	166.3
120°	184.3	186.4	184.7	184.3	183.6
122.5°	201.6	203.0	202.3	201.2	200.2
125°	219.2	220.3	219.6	218.1	216.7
127.5°	235.4	237.5	236.8	234.7	233.3
130°	251.6	254.4	253.4	252.0	249.5
132.5°	267.8	270.7	269.9	268.2	266.4
135°	284.4	286.5	286.2	284.8	284.0
137.5°	299.6	301.3	302.4	300.6	299.6
140°	315.4	317.2	317.5	317.2	314.7
142.5°	329.9	331.6	332.3	332.0	330.2
145°	345.0	345.7	346.8	346.4	345.0
147.5°	358.1	359.5	360.5	360.5	358.4
150°	371.8	372.5	373.2	373.2	371.1
152.5°	383.1	384.1	384.5	385.2	383.4
155°	395.1	395.1	395.4	396.8	394.4
157.5°	405.3	404.9	405.3	406.7	404.6
160°	414.8	414.1	414.1	415.8	414.4
162.5°	423.2	422.2	422.5	424.3	421.8
165°	430.3	429.2	429.2	431.4	428.9
167.5°	436.3	434.9	435.2	437.3	435.2
170°	441.2	439.8	439.8	442.3	439.8
172.5°	445.1	443.7	443.7	445.8	443.3
175°	447.6	446.2	446.2	448.3	445.8
177.5°	449.0	447.6	447.6	449.7	447.2
180°	448.6	448.6	448.6	448.6	448.6

(END OF REPORT)