

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: P1010844

Luminaire Tested: S123RDIP-B1165D365UB2750-4F0-XX-W2A-F_2700K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1010844
REPORT IS A COMBINATION OF REPORTS P993010 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B1165D365UB2750-4F0-XX-W2A-F_2700K
Description: Define 3 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

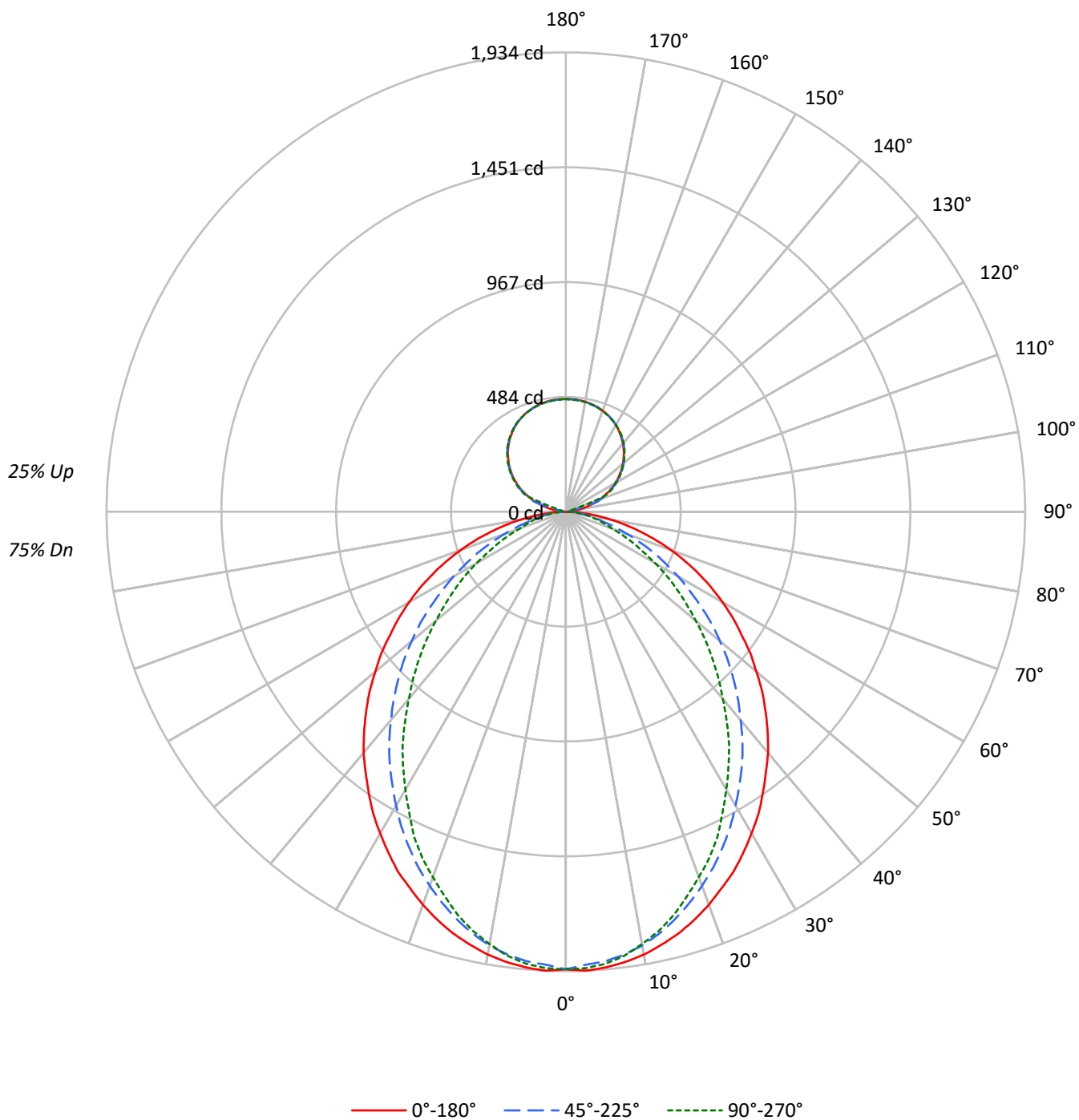
Lumens per Lamp: N/A
Luminaire Lumens: 5798.0 lumens
Efficiency: N/A
Efficacy: 82.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 70.6
Input Voltage (V): 120
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	50	30	10
RCR																				
0	113	113	113	113	108	108	108	108	97	97	97	88	88	88	79	79	79	79	79	75
1	104	100	96	92	99	95	92	88	86	84	81	78	76	74	71	69	68	68	68	64
2	95	88	81	76	90	84	78	73	76	72	68	69	66	63	63	60	58	58	58	55
3	87	77	70	64	83	74	67	62	68	62	58	62	57	54	56	53	50	50	50	47
4	80	69	61	55	76	66	59	53	60	55	50	55	50	47	50	47	43	43	43	41
5	74	62	54	47	70	59	52	46	54	48	43	50	45	41	46	41	38	38	38	35
6	68	56	48	42	65	54	46	40	49	43	38	45	40	36	42	37	34	34	34	31
7	63	51	43	37	60	49	41	36	45	39	34	41	36	32	38	34	30	30	30	28
8	59	46	38	33	56	45	37	32	41	35	30	38	33	29	35	31	27	27	27	25
9	55	42	35	30	52	41	34	29	38	32	27	35	30	26	33	28	25	25	25	23
10	52	39	32	27	49	38	31	26	35	29	25	33	27	24	30	26	23	23	23	21

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	3.1
10°-20°	503.7	8.7
20°-30°	725.2	12.5
30°-40°	816.6	14.1
40°-50°	781.2	13.5
50°-60°	639.4	11.0
60°-70°	431.1	7.4
70°-80°	216.2	3.7
80°-90°	57.5	1.0
90°-100°	16.7	0.3
100°-110°	80.9	1.4
110°-120°	198.2	3.4
120°-130°	251.6	4.3
130°-140°	268.8	4.6
140°-150°	251.3	4.3
150°-160°	202.7	3.5
160°-170°	130.8	2.3
170°-180°	45.1	0.8
0°-30°	1409.9	24.3
0°-40°	2226.5	38.4
0°-60°	3647.1	62.9
0°-90°	4351.9	75.1
90°-120°	295.8	5.1
90°-150°	1067.4	18.4
90°-180°	1446.0	24.9
0°-180°	5798.0	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	6
95°	22	7	11	13	13	26
105°	105	109	77	15	16	111
115°	197	199	202	206	207	195
125°	278	280	282	283	283	248
135°	346	348	349	350	349	266
145°	399	401	402	403	403	250
155°	439	439	439	441	439	202
165°	463	462	462	465	462	131
175°	474	473	473	475	473	45
180°	474	474	474	474	474	

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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°	8.1	6.0	9.2	11.6	12.0
95°	21.5	7.0	10.9	13.4	13.4
97.5°	39.1	29.2	11.3	14.1	14.4
100°	59.6	66.6	11.6	14.4	14.8
102.5°	82.8	87.4	26.1	14.4	15.2
105°	105.0	108.9	77.2	14.8	15.5
107.5°	128.6	131.8	137.1	82.8	36.7
110°	152.2	155.1	158.9	147.3	96.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174.8	177.3	181.1	184.3	183.6
115°	197.0	199.1	202.3	205.8	207.2
117.5°	218.8	221.3	223.1	225.9	226.2
120°	238.9	242.1	243.2	246.0	246.0
122.5°	259.4	261.8	263.2	265.0	265.4
125°	277.7	280.5	281.9	282.6	283.3
127.5°	296.0	298.8	300.6	301.7	301.0
130°	312.9	315.8	317.2	318.6	317.9
132.5°	329.1	332.0	333.0	334.4	333.4
135°	345.7	347.8	349.2	350.3	349.2
137.5°	359.8	362.6	363.3	365.1	364.4
140°	373.9	376.0	377.1	378.5	377.8
142.5°	386.9	389.1	390.1	391.2	390.1
145°	398.9	401.4	402.1	402.8	402.8
147.5°	410.6	412.3	413.0	413.7	412.0
150°	421.1	422.2	422.9	423.6	422.5
152.5°	430.6	431.0	431.3	432.8	431.0
155°	439.4	438.7	439.1	440.9	438.7
157.5°	446.5	446.5	446.1	448.3	445.4
160°	452.8	452.5	452.1	454.2	451.8
162.5°	458.8	457.8	457.4	459.9	457.8
165°	463.4	462.4	462.0	464.8	462.4
167.5°	467.3	465.9	465.9	468.7	465.9
170°	470.5	469.0	469.0	471.9	469.0
172.5°	472.6	470.8	471.2	474.0	470.8
175°	474.3	472.6	472.9	475.4	472.6
177.5°	475.0	473.3	473.6	476.5	472.9
180°	474.3	474.3	474.3	474.3	474.3

(END OF REPORT)