

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: P992646

Luminaire Tested: S123R3DR-B1165DB2750-4F0-XX-W2A-F_2700K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P992646
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DR-B1165DB2750-4F0-XX-W2A-F_2700K
Description: Define 3 3in Regressed Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

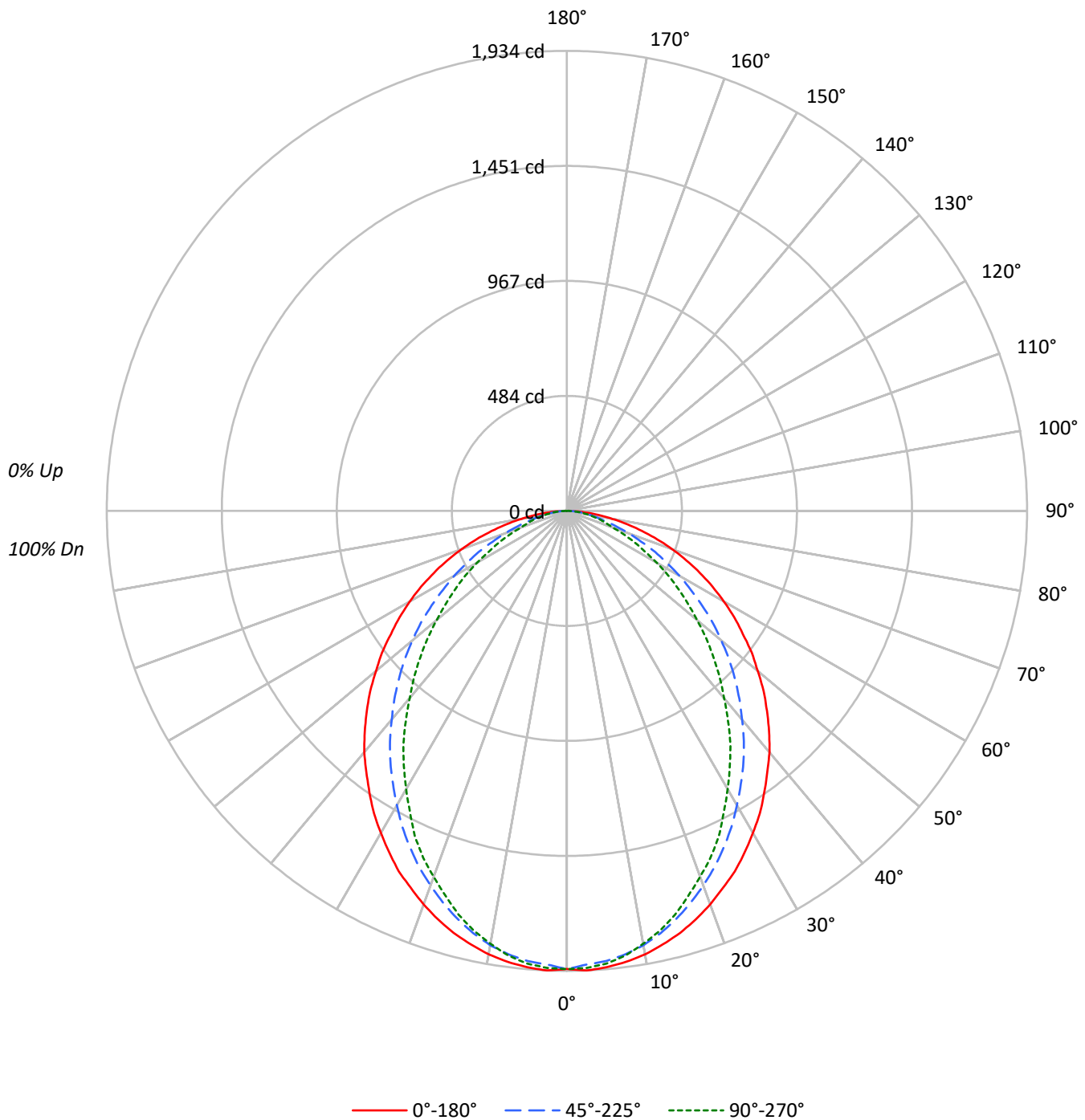
Lumens per Lamp: N/A
Luminaire Lumens: 4351.0 lumens
Efficiency: N/A
Efficacy: 71.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.3
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				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10		0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102		100
1	110	105	101	98	107	103	99	96	99	96	93		95	93	90		91	89	88		86
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81	78	75		73
3	92	82	75	68	90	81	74	68	78	72	67		75	70	66		73	68	64		62
4	85	73	65	59	83	72	64	58	70	63	58		67	62	57		65	60	56		54
5	78	66	57	51	76	65	57	51	63	56	50		61	55	50		59	54	49		47
6	73	60	51	45	71	59	51	45	57	50	45		55	49	44		54	48	44		42
7	67	54	46	40	66	54	46	40	52	45	40		51	44	39		49	44	39		37
8	63	50	42	36	61	49	41	36	48	41	36		47	40	36		46	40	35		34
9	59	46	38	33	58	45	38	33	44	37	32		43	37	32		42	36	32		30
10	55	43	35	30	54	42	35	30	41	34	30		40	34	29		39	34	29		28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20730	20730	20730
5°	20809	20523	20641
10°	20692	20265	20196
15°	20470	19791	19582
20°	20165	19198	18751
25°	19849	18532	17939
30°	19433	17764	16793
35°	19006	16994	15742
40°	18612	16087	14442
45°	18095	15194	13268
50°	17524	14177	11953
55°	16942	13014	10729
60°	16409	11769	9382
65°	15715	10422	8036
70°	14845	8749	6489
75°	13579	6887	6105
80°	12100	6100	5616
85°	10226	5397	5014

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 18095 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.0	4.2
10°-20°	503.7	11.6
20°-30°	725.2	16.7
30°-40°	816.6	18.8
40°-50°	781.2	18.0
50°-60°	639.4	14.7
60°-70°	431.1	9.9
70°-80°	216.2	5.0
80°-90°	56.5	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1409.9	32.4
0°-40°	2226.5	51.2
0°-60°	3647.1	83.8
0°-90°	4351.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4351.0	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	96
90°	0	0	0	0	0	



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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°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)