

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: P1004908

Luminaire Tested: S125R3DR-B850DB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004908
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125R3DR-B850DB2750-4F0-XX-W2A-F_3500K
Description: Define 5 3in Regressed Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

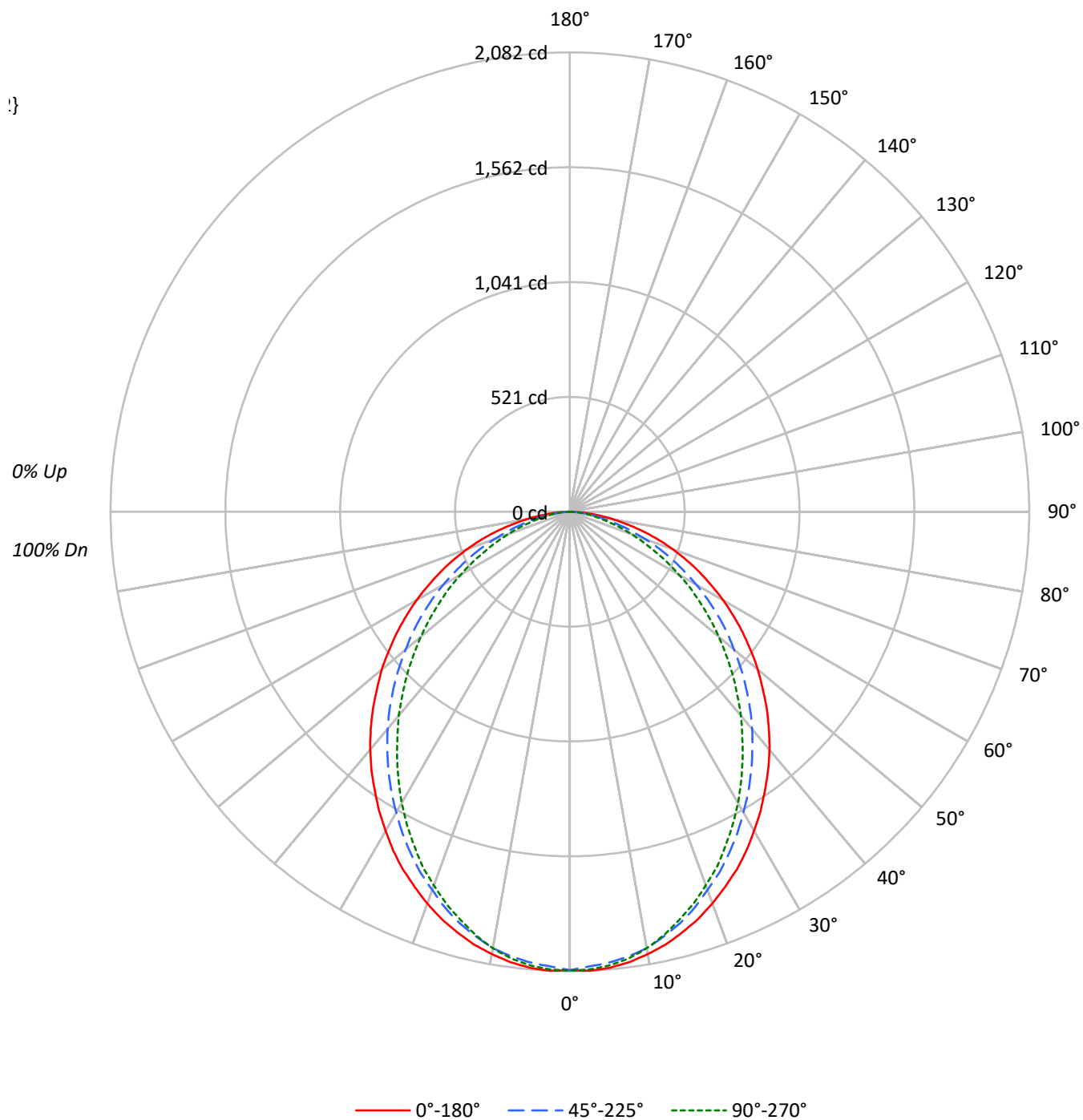
Lumens per Lamp: N/A
Luminaire Lumens: 4909.0 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.3
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	105	101	97	107	103	99	96	99	96	93		95	92	90		91
2	100	92	86	80	98	90	84	79	87	82	78		84	79	76		81
3	92	82	74	68	89	80	73	67	77	71	66		74	69	65		72
4	84	73	64	58	82	71	64	57	69	62	57		67	61	56		64
5	78	65	57	50	76	64	56	50	62	55	49		60	54	49		58
6	72	59	50	44	70	58	50	44	56	49	44		55	48	43		53
7	67	54	45	39	65	53	45	39	51	44	39		50	43	39		49
8	62	49	41	35	61	48	41	35	47	40	35		46	39	35		45
9	58	45	37	32	57	45	37	32	44	37	32		42	36	31		41
10	55	42	34	29	54	41	34	29	40	34	29		39	33	29		39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13313	13313	13313
5°	13343	13192	13272
10°	13242	13068	13068
15°	13084	12803	12699
20°	12882	12433	12284
25°	12647	12070	11804
30°	12353	11645	11273
35°	12054	11207	10679
40°	11774	10750	10094
45°	11432	10238	9456
50°	11090	9683	8790
55°	10693	9151	8081
60°	10296	8506	7319
65°	9826	7756	6448
70°	9290	6821	5556
75°	8545	5751	4622
80°	7527	4516	3878
85°	6344	3690	3462

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11432 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.6	4.0
10°-20°	546.5	11.1
20°-30°	792.4	16.1
30°-40°	902.8	18.4
40°-50°	879.9	17.9
50°-60°	740.5	15.1
60°-70°	518.9	10.6
70°-80°	266.0	5.4
80°-90°	66.3	1.4
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°	1534.4	31.3
0°-40°	2437.2	49.6
0°-60°	4057.7	82.7
0°-90°	4909.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4909.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2078	2078	2078	2078	2078	
5°	2075	2068	2051	2067	2064	197
15°	1973	1963	1930	1929	1914	556
25°	1789	1766	1707	1687	1670	823
35°	1541	1503	1433	1387	1365	965
45°	1262	1216	1130	1067	1044	973
55°	957	907	819	749	723	856
65°	648	595	512	449	425	642
75°	345	298	232	198	187	365
85°	86	58	50	49	47	99
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2077.8	2077.8	2077.8	2077.8	2077.8
2.5°	2082.5	2077.8	2062.1	2077.8	2076.2
5°	2074.6	2068.3	2051.1	2066.8	2063.6
7.5°	2058.9	2052.6	2032.2	2044.8	2041.7
10°	2035.4	2030.7	2008.7	2013.4	2008.7
12.5°	2008.7	2002.4	1971.0	1974.2	1966.3
15°	1972.6	1963.2	1930.2	1928.7	1914.5
17.5°	1935.0	1920.8	1881.6	1873.7	1862.8
20°	1889.4	1873.7	1823.5	1815.7	1801.6
22.5°	1839.2	1823.5	1770.2	1752.9	1741.9
25°	1789.0	1765.5	1707.4	1687.0	1669.7
27.5°	1732.5	1704.3	1643.1	1616.4	1599.1
30°	1669.7	1639.9	1574.0	1537.9	1523.8
32.5°	1608.5	1572.4	1505.0	1464.2	1445.3
35°	1541.1	1503.4	1432.8	1387.3	1365.3
37.5°	1476.7	1431.2	1359.0	1305.7	1283.7
40°	1407.7	1360.6	1285.3	1225.6	1206.8
42.5°	1335.5	1286.8	1208.4	1151.9	1122.1
45°	1261.7	1216.2	1129.9	1067.1	1043.6
47.5°	1184.8	1137.7	1051.4	987.1	960.4
50°	1112.6	1060.8	971.4	905.5	881.9
52.5°	1034.2	980.8	897.6	825.5	801.9
55°	957.3	907.1	819.2	748.6	723.4
57.5°	878.8	825.5	740.7	671.7	649.7
60°	803.5	748.6	663.8	594.8	571.2
62.5°	723.4	671.7	585.3	522.6	499.0
65°	648.1	594.8	511.6	448.8	425.3
67.5°	572.8	519.4	439.4	379.8	360.9
70°	495.9	442.5	364.1	315.4	296.6
72.5°	420.6	368.8	296.6	252.7	241.7
75°	345.2	298.2	232.3	197.7	186.7
77.5°	268.4	230.7	175.8	149.1	139.7
80°	204.0	166.3	122.4	108.3	105.1
82.5°	141.2	108.3	81.6	76.9	75.3
85°	86.3	58.1	50.2	48.6	47.1
87.5°	36.1	25.1	23.5	23.5	22.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)