

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: P1004654

Luminaire Tested: S125DR-B850DB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004654
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DR-B850DB2750-4F0-XX-W2A-F_3500K
Description: Define 5 Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

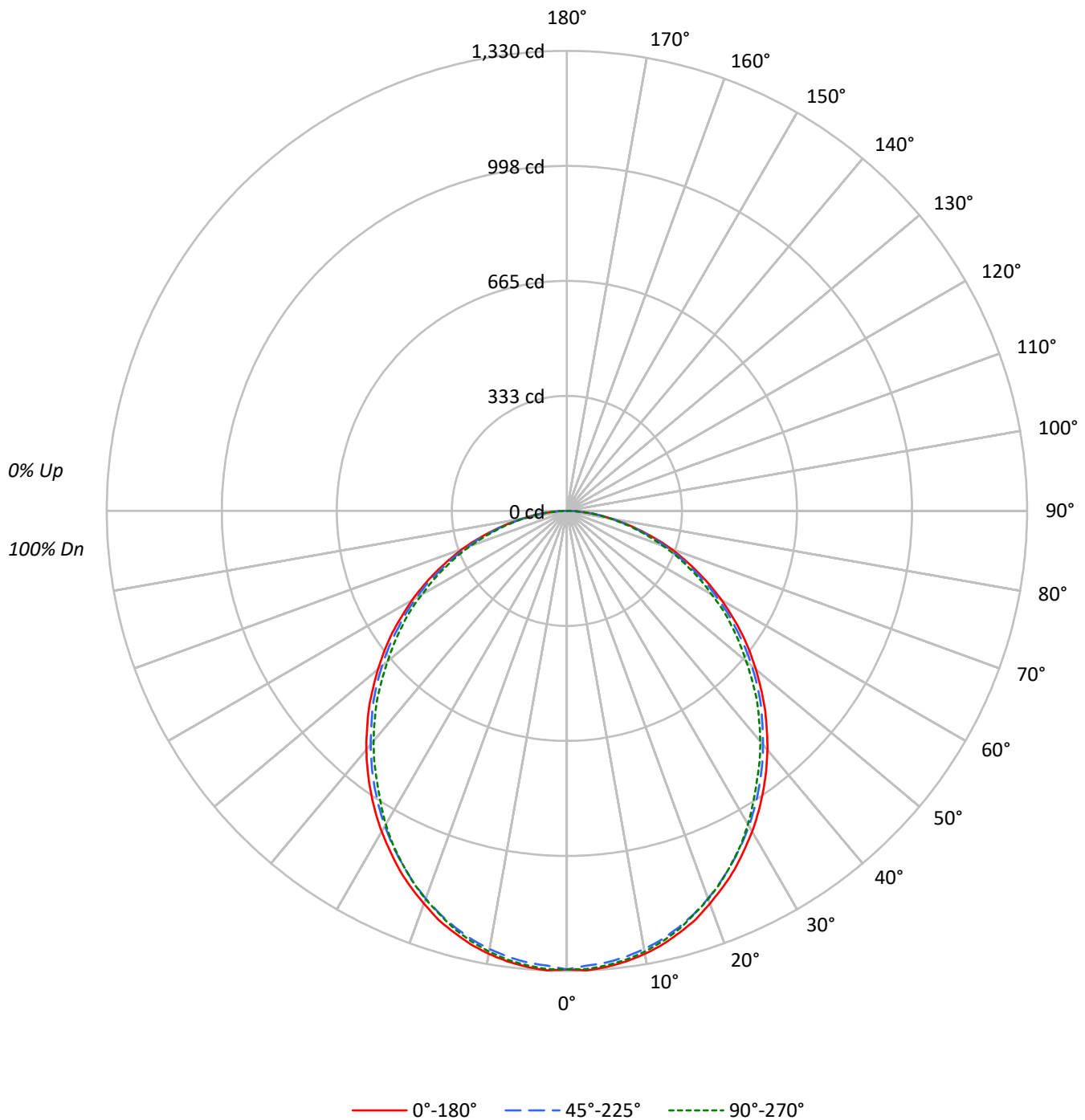
Lumens per Lamp: N/A
Luminaire Lumens: 3450.0 lumens
Efficiency: N/A
Efficacy: 96.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35.9
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: P1004654

CATALOG NUMBER: S125DR-B850DB2750-4F0-XX-W2A-F_3500K

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	109	104	100	96	106	102	98	95	98	94	92		94	91	89		90	88	86		84
2	99	91	84	79	97	89	83	78	86	80	76		82	78	74		79	76	72		70
3	91	80	72	66	88	79	71	65	76	69	64		73	67	63		70	66	62		59
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63	58	53		51
5	76	64	55	48	74	63	54	48	60	53	47		58	52	47		57	51	46		44
6	71	57	49	42	69	56	48	42	55	47	42		53	46	41		51	46	41		39
7	66	52	43	37	64	51	43	37	50	42	37		48	42	37		47	41	36		34
8	61	48	39	33	60	47	39	33	46	38	33		44	38	33		43	37	33		31
9	57	44	36	30	56	43	35	30	42	35	30		41	34	30		40	34	30		28
10	54	40	33	27	52	40	32	27	39	32	27		38	32	27		37	31	27		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8493	8493	8493
5°	8512	8430	8485
10°	8460	8371	8419
15°	8368	8271	8305
20°	8237	8129	8144
25°	8095	7962	7955
30°	7921	7782	7743
35°	7735	7587	7481
40°	7543	7376	7271
45°	7336	7184	7041
50°	7108	6951	6742
55°	6888	6689	6501
60°	6625	6424	6194
65°	6311	6105	5899
70°	6011	5736	5539
75°	5478	5295	5114
80°	4874	4797	4682
85°	4242	4315	4087

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7336 cd/sqm

TEST NUMBER: P1004654

CATALOG NUMBER: S125DR-B850DB2750-4F0-XX-W2A-F_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.1	3.6
10°-20°	353.3	10.2
20°-30°	521.6	15.1
30°-40°	608.6	17.6
40°-50°	611.2	17.7
50°-60°	536.5	15.6
60°-70°	399.6	11.6
70°-80°	228.2	6.6
80°-90°	65.9	1.9
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°	1000.0	29.0
0°-40°	1608.5	46.6
0°-60°	2756.3	79.9
0°-90°	3450.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3450.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1326	1326	1326	1326	1326	
5°	1323	1321	1311	1320	1319	126
15°	1262	1258	1247	1252	1252	356
25°	1145	1140	1126	1128	1125	527
35°	989	985	970	965	956	619
45°	810	805	793	780	777	624
55°	617	614	599	589	582	550
65°	416	414	403	393	389	413
75°	221	219	214	211	207	236
85°	58	59	59	58	56	67
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1325.5	1325.5	1325.5	1325.5	1325.5
2.5°	1329.7	1326.6	1316.1	1326.6	1325.5
5°	1323.4	1321.3	1310.8	1320.3	1319.2
7.5°	1314.0	1311.9	1300.4	1309.8	1308.7
10°	1300.4	1298.3	1286.7	1295.1	1294.1
12.5°	1283.6	1279.4	1268.9	1275.2	1275.2
15°	1261.6	1258.4	1246.9	1252.1	1252.1
17.5°	1238.5	1233.2	1221.7	1228.0	1222.7
20°	1208.1	1206.0	1192.3	1199.7	1194.4
22.5°	1177.7	1173.5	1160.9	1165.1	1161.9
25°	1145.1	1139.9	1126.3	1128.4	1125.2
27.5°	1107.4	1104.2	1090.6	1091.7	1088.5
30°	1070.7	1067.5	1051.8	1049.7	1046.6
32.5°	1030.8	1025.6	1012.0	1007.8	1001.5
35°	988.9	984.7	970.0	964.8	956.4
37.5°	945.9	940.7	927.0	919.7	914.4
40°	901.9	896.6	881.9	872.5	869.3
42.5°	854.7	850.5	835.8	827.4	822.2
45°	809.6	805.4	792.8	780.2	777.1
47.5°	760.3	761.3	745.6	733.0	725.7
50°	713.1	709.9	697.4	683.7	676.4
52.5°	664.9	662.8	649.1	637.6	629.2
55°	616.6	613.5	598.8	589.4	582.0
57.5°	565.2	564.2	551.6	539.0	535.9
60°	517.0	512.8	501.3	490.8	483.4
62.5°	466.7	463.5	454.1	442.5	437.3
65°	416.3	414.2	402.7	393.3	389.1
67.5°	367.0	362.8	354.5	346.1	344.0
70°	320.9	315.6	306.2	299.9	295.7
72.5°	270.6	267.4	262.2	254.8	250.6
75°	221.3	219.2	213.9	210.8	206.6
77.5°	175.1	174.1	170.9	168.8	165.7
80°	132.1	132.1	130.0	129.0	126.9
82.5°	94.4	92.3	92.3	90.2	90.2
85°	57.7	58.7	58.7	57.7	55.6
87.5°	28.3	28.3	27.3	27.3	25.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)