

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: P1004668

Luminaire Tested: S125DR-B850DB50-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004668
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-B850DB50-4F0-XX-W2A-F
Description: Define 5 Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

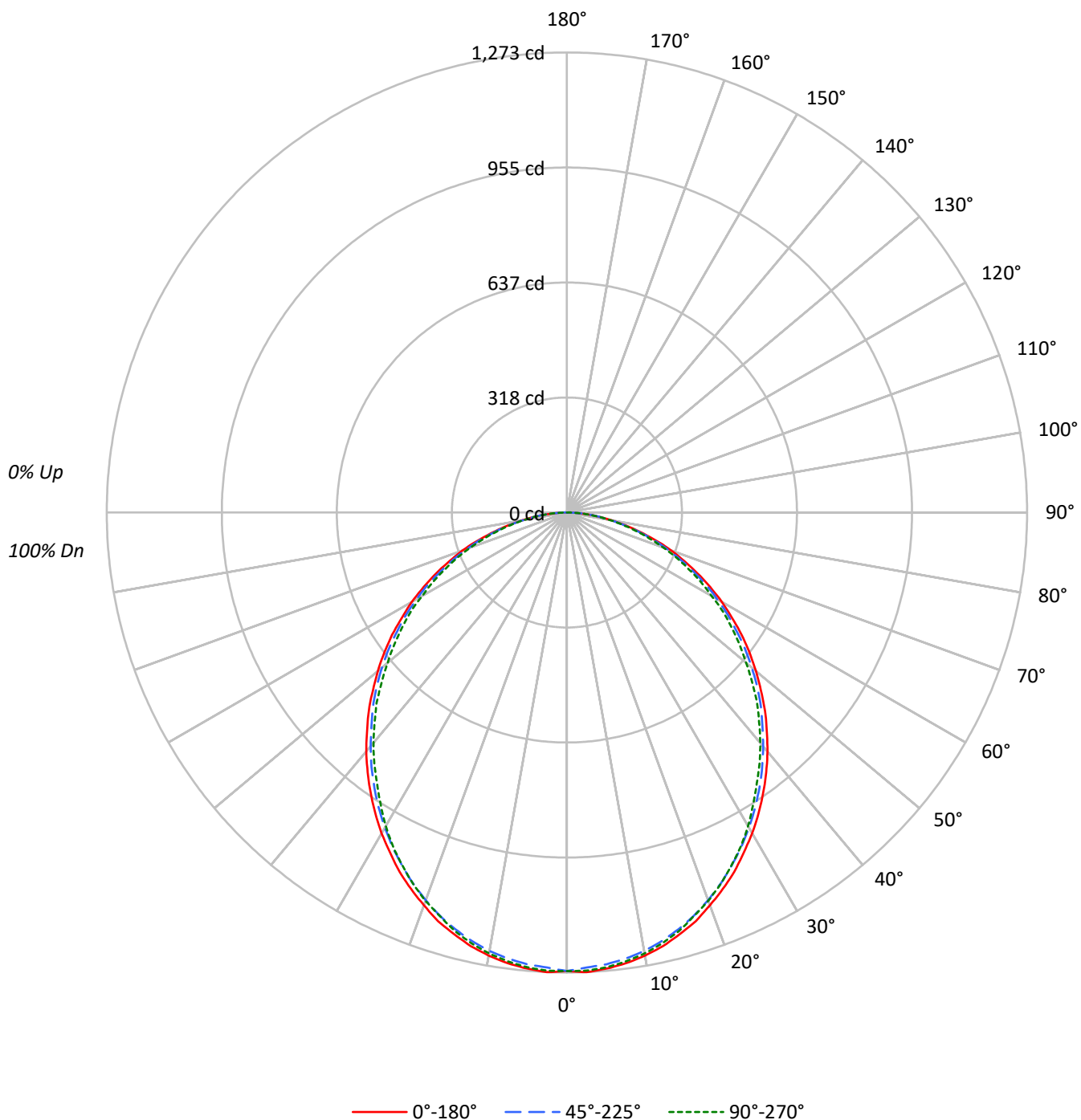
Lumens per Lamp: N/A
Luminaire Lumens: 3303.0 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

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

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8131	8131	8131
5°	8149	8072	8123
10°	8099	8015	8060
15°	8011	7918	7952
20°	7886	7783	7797
25°	7751	7623	7616
30°	7584	7450	7413
35°	7406	7264	7161
40°	7221	7062	6961
45°	7023	6877	6741
50°	6805	6655	6455
55°	6594	6404	6224
60°	6343	6150	5930
65°	6043	5844	5647
70°	5755	5493	5303
75°	5243	5070	4897
80°	4667	4594	4483
85°	4058	4131	3911

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7023 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.7	3.6
10°-20°	338.2	10.2
20°-30°	499.4	15.1
30°-40°	582.6	17.6
40°-50°	585.2	17.7
50°-60°	513.6	15.6
60°-70°	382.6	11.6
70°-80°	218.5	6.6
80°-90°	63.1	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°	957.4	29.0
0°-40°	1540.0	46.6
0°-60°	2638.8	79.9
0°-90°	3303.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3303.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1269	1269	1269	1269	1269	
5°	1267	1265	1255	1264	1263	120
15°	1208	1205	1194	1199	1199	341
25°	1096	1091	1078	1080	1077	504
35°	947	943	929	924	916	592
45°	775	771	759	747	744	597
55°	590	587	573	564	557	527
65°	399	397	386	376	372	395
75°	212	210	205	202	198	226
85°	55	56	56	55	53	64
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1269.0	1269.0	1269.0	1269.0	1269.0
2.5°	1273.1	1270.0	1260.0	1270.0	1269.0
5°	1267.0	1265.0	1255.0	1264.0	1263.0
7.5°	1258.0	1256.0	1244.9	1254.0	1253.0
10°	1244.9	1242.9	1231.9	1239.9	1238.9
12.5°	1228.9	1224.9	1214.8	1220.8	1220.8
15°	1207.8	1204.8	1193.7	1198.8	1198.8
17.5°	1185.7	1180.7	1169.6	1175.7	1170.6
20°	1156.6	1154.6	1141.5	1148.6	1143.5
22.5°	1127.5	1123.5	1111.4	1115.4	1112.4
25°	1096.4	1091.3	1078.3	1080.3	1077.3
27.5°	1060.2	1057.2	1044.1	1045.2	1042.1
30°	1025.1	1022.1	1007.0	1005.0	1002.0
32.5°	986.9	981.9	968.8	964.8	958.8
35°	946.8	942.7	928.7	923.7	915.6
37.5°	905.6	900.6	887.5	880.5	875.5
40°	863.4	858.4	844.4	835.3	832.3
42.5°	818.2	814.2	800.2	792.1	787.1
45°	775.1	771.1	759.0	747.0	744.0
47.5°	727.9	728.9	713.8	701.8	694.8
50°	682.7	679.7	667.7	654.6	647.6
52.5°	636.5	634.5	621.5	610.4	602.4
55°	590.3	587.3	573.3	564.2	557.2
57.5°	541.1	540.1	528.1	516.0	513.0
60°	495.0	490.9	479.9	469.9	462.8
62.5°	446.8	443.8	434.7	423.7	418.7
65°	398.6	396.6	385.5	376.5	372.5
67.5°	351.4	347.4	339.3	331.3	329.3
70°	307.2	302.2	293.2	287.1	283.1
72.5°	259.0	256.0	251.0	244.0	240.0
75°	211.8	209.8	204.8	201.8	197.8
77.5°	167.7	166.7	163.6	161.6	158.6
80°	126.5	126.5	124.5	123.5	121.5
82.5°	90.4	88.4	88.4	86.3	86.3
85°	55.2	56.2	56.2	55.2	53.2
87.5°	27.1	27.1	26.1	26.1	24.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)