

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: P1004659

Luminaire Tested: S125DR-B850DB30-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004659
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-B850DB30-4F0-XX-W2A-F
Description: Define 5 Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

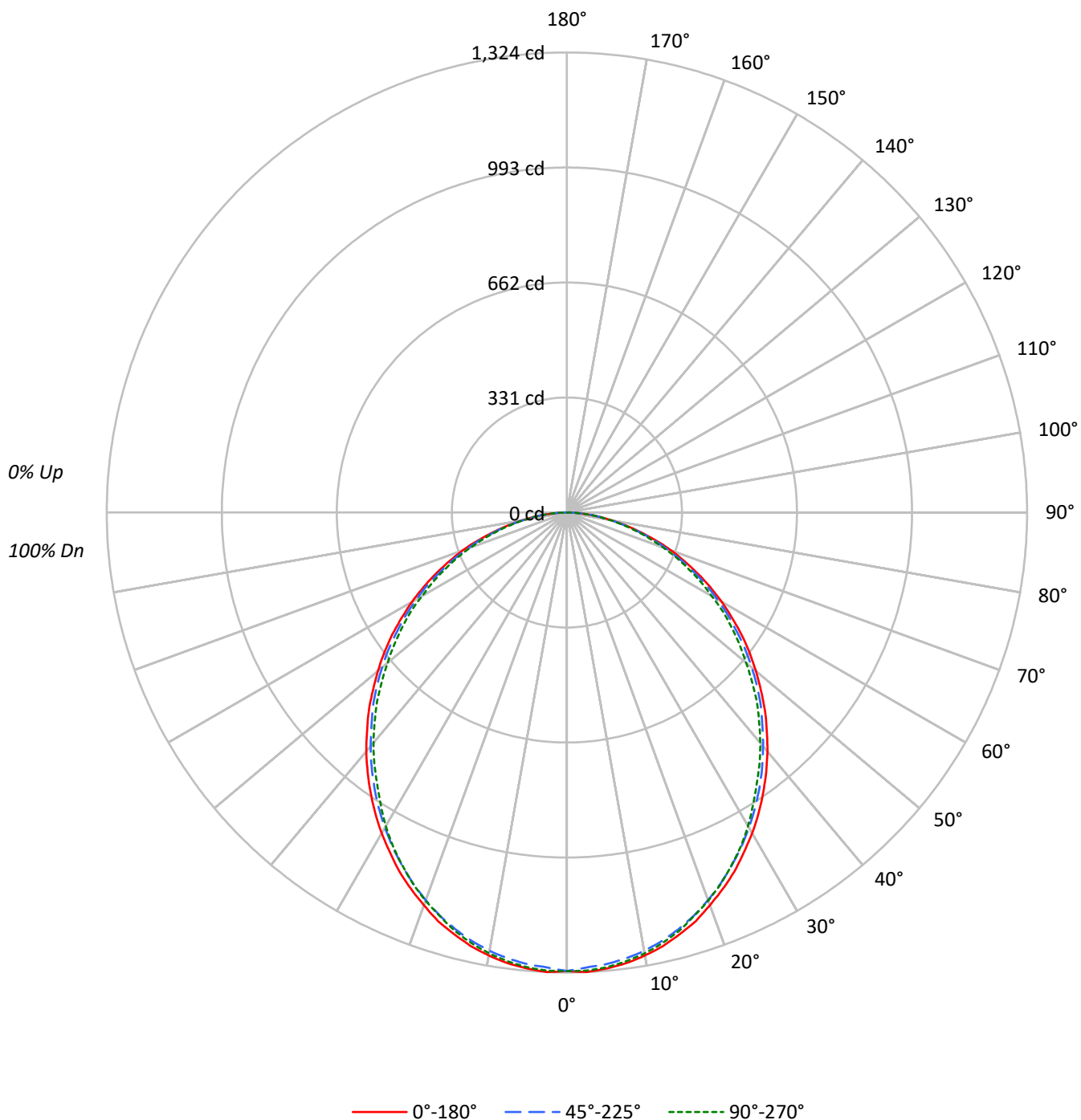
Lumens per Lamp: N/A
Luminaire Lumens: 3435.0 lumens
Efficiency: N/A
Efficacy: 95.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

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°	8456	8456	8456
5°	8475	8394	8448
10°	8423	8335	8382
15°	8332	8234	8269
20°	8201	8095	8108
25°	8061	7928	7920
30°	7887	7747	7709
35°	7701	7554	7448
40°	7510	7344	7240
45°	7304	7152	7010
50°	7077	6921	6713
55°	6858	6660	6473
60°	6595	6396	6167
65°	6284	6078	5873
70°	5985	5712	5515
75°	5454	5273	5092
80°	4856	4778	4660
85°	4220	4301	4065

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 7304 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.5	3.6
10°-20°	351.8	10.2
20°-30°	519.3	15.1
30°-40°	605.9	17.6
40°-50°	608.5	17.7
50°-60°	534.2	15.6
60°-70°	397.9	11.6
70°-80°	227.2	6.6
80°-90°	65.6	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°	995.6	29.0
0°-40°	1601.5	46.6
0°-60°	2744.3	79.9
0°-90°	3435.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3435.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1320	1320	1320	1320	1320	
5°	1318	1316	1305	1314	1314	125
15°	1256	1253	1241	1247	1247	354
25°	1140	1135	1121	1124	1120	525
35°	985	980	966	961	952	616
45°	806	802	789	777	774	621
55°	614	611	596	587	580	548
65°	414	412	401	392	387	411
75°	220	218	213	210	206	235
85°	57	58	58	57	55	67
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1319.8	1319.8	1319.8	1319.8	1319.8
2.5°	1323.9	1320.8	1310.4	1320.8	1319.8
5°	1317.7	1315.6	1305.1	1314.5	1313.5
7.5°	1308.3	1306.2	1294.7	1304.1	1303.1
10°	1294.7	1292.6	1281.1	1289.5	1288.4
12.5°	1278.0	1273.8	1263.4	1269.6	1269.6
15°	1256.1	1252.9	1241.4	1246.7	1246.7
17.5°	1233.1	1227.9	1216.4	1222.7	1217.4
20°	1202.8	1200.7	1187.2	1194.5	1189.2
22.5°	1172.5	1168.4	1155.8	1160.0	1156.9
25°	1140.2	1134.9	1121.4	1123.5	1120.3
27.5°	1102.6	1099.4	1085.9	1086.9	1083.8
30°	1066.0	1062.9	1047.2	1045.2	1042.0
32.5°	1026.4	1021.1	1007.6	1003.4	997.1
35°	984.6	980.4	965.8	960.6	952.2
37.5°	941.8	936.6	923.0	915.7	910.5
40°	897.9	892.7	878.1	868.7	865.6
42.5°	851.0	846.8	832.2	823.8	818.6
45°	806.1	801.9	789.3	776.8	773.7
47.5°	757.0	758.0	742.4	729.8	722.5
50°	710.0	706.9	694.3	680.8	673.5
52.5°	662.0	659.9	646.3	634.8	626.5
55°	613.9	610.8	596.2	586.8	579.5
57.5°	562.8	561.7	549.2	536.7	533.5
60°	514.7	510.6	499.1	488.6	481.3
62.5°	464.6	461.5	452.1	440.6	435.4
65°	414.5	412.4	400.9	391.5	387.4
67.5°	365.4	361.3	352.9	344.6	342.5
70°	319.5	314.3	304.9	298.6	294.4
72.5°	269.4	266.2	261.0	253.7	249.5
75°	220.3	218.2	213.0	209.9	205.7
77.5°	174.4	173.3	170.2	168.1	165.0
80°	131.6	131.6	129.5	128.4	126.3
82.5°	94.0	91.9	91.9	89.8	89.8
85°	57.4	58.5	58.5	57.4	55.3
87.5°	28.2	28.2	27.1	27.1	25.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)