

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: P1004665

Luminaire Tested: S125DR-B850DB40-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004665
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-B850DB40-4F0-XX-W2A-F
Description: Define 5 Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

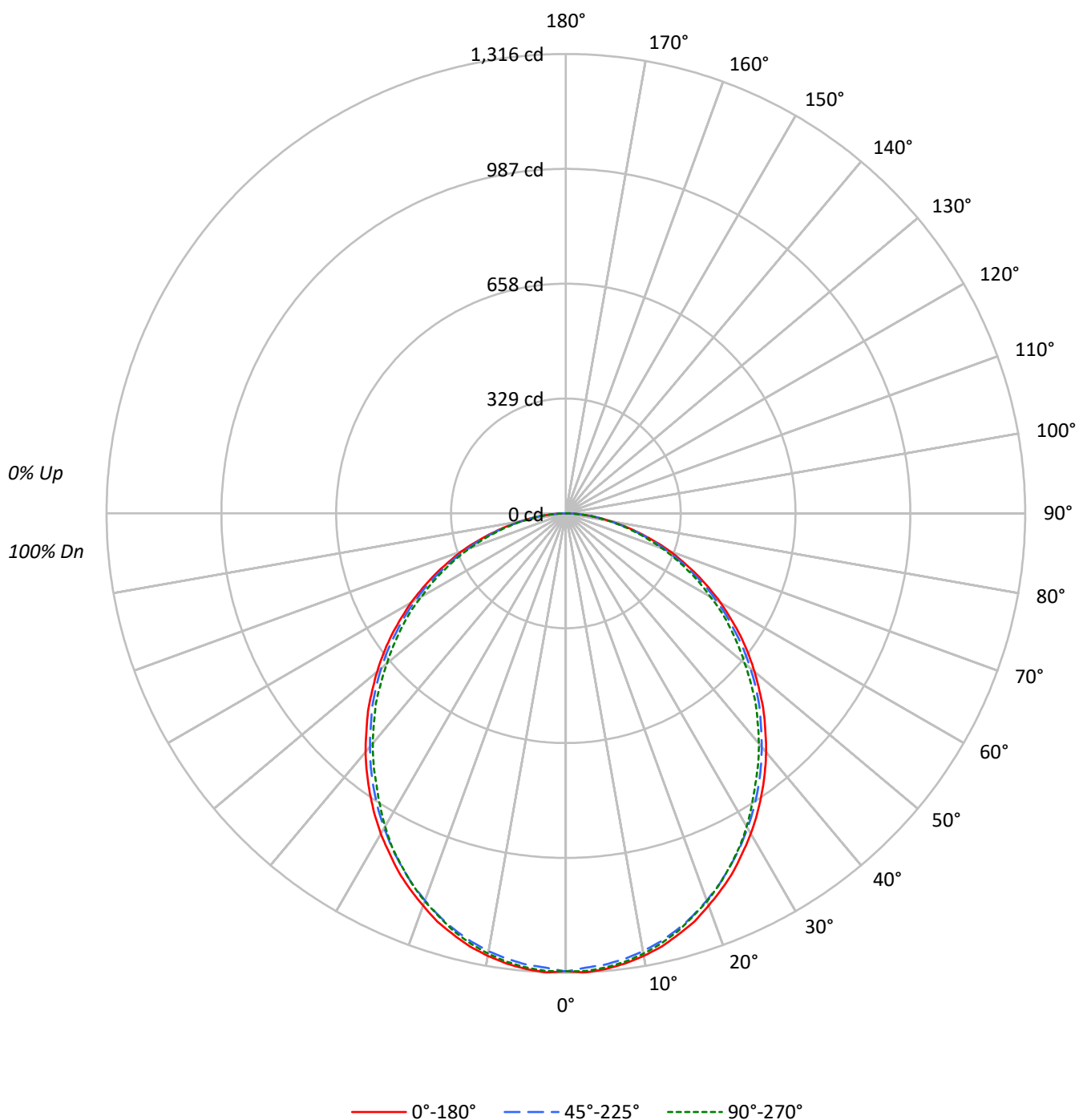
Lumens per Lamp: N/A
Luminaire Lumens: 3415.0 lumens
Efficiency: N/A
Efficacy: 95.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

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

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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			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°	8407	8407	8407
5°	8425	8345	8398
10°	8374	8287	8333
15°	8283	8187	8221
20°	8153	8047	8061
25°	8013	7881	7874
30°	7841	7702	7665
35°	7657	7510	7405
40°	7466	7302	7197
45°	7261	7111	6970
50°	7036	6881	6673
55°	6818	6621	6435
60°	6557	6358	6132
65°	6248	6043	5838
70°	5950	5678	5483
75°	5421	5243	5062
80°	4826	4749	4634
85°	4198	4271	4043

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7261 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.8	3.6
10°-20°	349.7	10.2
20°-30°	516.3	15.1
30°-40°	602.4	17.6
40°-50°	605.0	17.7
50°-60°	531.1	15.6
60°-70°	395.6	11.6
70°-80°	225.9	6.6
80°-90°	65.2	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°	989.8	29.0
0°-40°	1592.2	46.6
0°-60°	2728.3	79.9
0°-90°	3415.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3415.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1312	1312	1312	1312	1312	
5°	1310	1308	1298	1307	1306	124
15°	1249	1246	1234	1239	1239	352
25°	1134	1128	1115	1117	1114	522
35°	979	975	960	955	947	612
45°	801	797	785	772	769	617
55°	610	607	593	583	576	545
65°	412	410	399	389	385	409
75°	219	217	212	209	204	233
85°	57	58	58	57	55	66
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1312.1	1312.1	1312.1	1312.1	1312.1
2.5°	1316.2	1313.1	1302.7	1313.1	1312.1
5°	1310.0	1307.9	1297.5	1306.9	1305.8
7.5°	1300.7	1298.6	1287.2	1296.5	1295.5
10°	1287.2	1285.1	1273.7	1282.0	1280.9
12.5°	1270.6	1266.4	1256.0	1262.2	1262.2
15°	1248.8	1245.6	1234.2	1239.4	1239.4
17.5°	1225.9	1220.7	1209.3	1215.5	1210.3
20°	1195.8	1193.7	1180.2	1187.5	1182.3
22.5°	1165.7	1161.6	1149.1	1153.3	1150.1
25°	1133.5	1128.3	1114.8	1116.9	1113.8
27.5°	1096.2	1093.0	1079.6	1080.6	1077.5
30°	1059.8	1056.7	1041.1	1039.1	1036.0
32.5°	1020.4	1015.2	1001.7	997.5	991.3
35°	978.9	974.7	960.2	955.0	946.7
37.5°	936.3	931.1	917.6	910.4	905.2
40°	892.7	887.5	873.0	863.6	860.5
42.5°	846.0	841.8	827.3	819.0	813.8
45°	801.4	797.2	784.8	772.3	769.2
47.5°	752.6	753.6	738.0	725.6	718.3
50°	705.9	702.7	690.3	676.8	669.5
52.5°	658.1	656.0	642.5	631.1	622.8
55°	610.4	607.2	592.7	583.4	576.1
57.5°	559.5	558.5	546.0	533.5	530.4
60°	511.7	507.6	496.2	485.8	478.5
62.5°	461.9	458.8	449.5	438.0	432.9
65°	412.1	410.0	398.6	389.3	385.1
67.5°	363.3	359.2	350.9	342.6	340.5
70°	317.6	312.4	303.1	296.9	292.7
72.5°	267.8	264.7	259.5	252.2	248.1
75°	219.0	216.9	211.8	208.6	204.5
77.5°	173.4	172.3	169.2	167.1	164.0
80°	130.8	130.8	128.7	127.7	125.6
82.5°	93.4	91.3	91.3	89.3	89.3
85°	57.1	58.1	58.1	57.1	55.0
87.5°	28.0	28.0	27.0	27.0	24.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)