

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: P1004577

Luminaire Tested: S125DR-B1270DB50-4F0-XX-W2A-D

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004577
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-17)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DR-B1270DB50-4F0-XX-W2A-D
Description: Define 5 Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

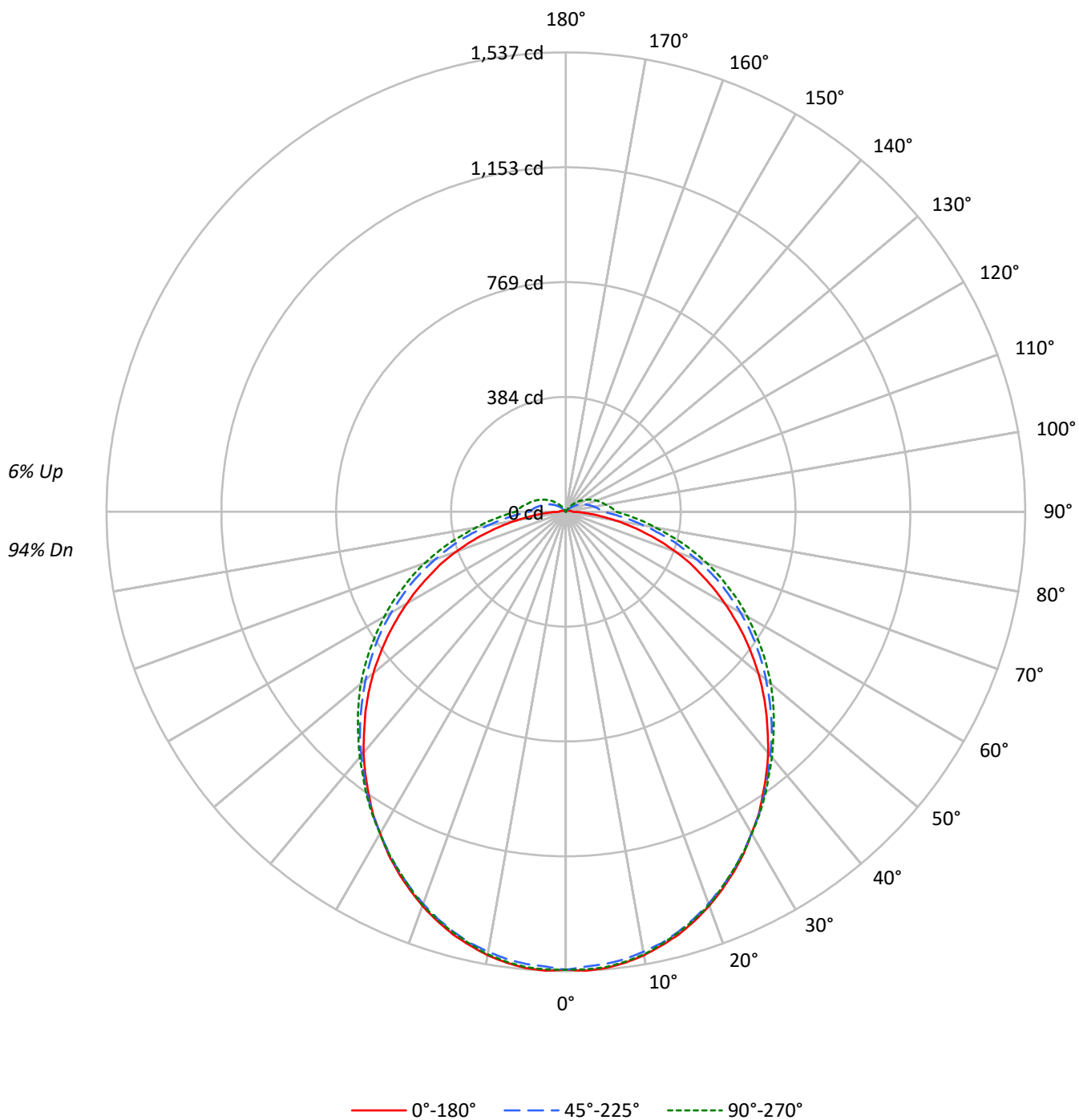
Lumens per Lamp: N/A
Luminaire Lumens: 4747.0 lumens
Efficiency: N/A
Efficacy: 77.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

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	30	10
RCR																	
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96
1	106	101	96	92	103	98	94	90	93	89	86	88	85	82	83	81	79
2	96	88	80	74	93	85	78	73	81	75	70	76	72	68	72	69	65
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55
4	80	68	59	52	77	66	58	51	63	55	50	60	53	48	57	51	47
5	74	60	51	44	71	59	50	44	56	49	43	53	47	42	51	45	41
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36
7	63	49	40	34	61	48	40	34	46	39	33	44	37	33	42	36	32
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	36	30	26
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9818	9818	9818
5°	9856	9768	9836
10°	9803	9725	9784
15°	9706	9646	9666
20°	9567	9516	9547
25°	9400	9367	9356
30°	9192	9192	9203
35°	9001	9048	9083
40°	8808	8896	8972
45°	8590	8807	8916
50°	8386	8715	8925
55°	8139	8676	8927
60°	7873	8643	8990
65°	7608	8678	9110
70°	7317	8696	9400
75°	6842	9001	9929
80°	6265	9811	11254
85°	6072	13585	16901

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 28907 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.0	3.1
10°-20°	411.6	8.7
20°-30°	612.1	12.9
30°-40°	724.9	15.3
40°-50°	749.5	15.8
50°-60°	690.4	14.5
60°-70°	558.1	11.8
70°-80°	373.4	7.9
80°-90°	193.0	4.1
90°-100°	108.7	2.3
100°-110°	80.2	1.7
110°-120°	53.6	1.1
120°-130°	30.4	0.6
130°-140°	13.3	0.3
140°-150°	2.6	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1168.8	24.6
0°-40°	1893.7	39.9
0°-60°	3333.6	70.2
0°-90°	4458.2	93.9
90°-120°	242.5	5.1
90°-150°	288.8	6.1
90°-180°	289.0	6.1
0°-180°	4747.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1532	1532	1532	1532	1532	
5°	1532	1529	1519	1531	1529	145
15°	1463	1465	1454	1463	1457	412
25°	1330	1334	1325	1331	1324	612
35°	1151	1161	1157	1161	1161	720
45°	948	964	972	982	984	731
55°	729	753	777	793	799	651
65°	502	536	572	595	601	498
75°	276	316	364	394	401	293
85°	83	132	185	218	230	86
90°	24	72	123	158	168	17
95°	20	59	110	143	153	15
105°	14	38	83	113	123	14
115°	9	20	59	86	95	9
125°	6	4	35	59	66	5
135°	3	2	12	32	39	2
145°	2	0	0	8	14	1
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1532.4	1532.4	1532.4	1532.4	1532.4
2.5°	1536.9	1533.9	1523.4	1533.9	1532.4
5°	1532.4	1529.4	1518.8	1530.9	1529.4
7.5°	1521.8	1520.3	1509.8	1520.3	1518.8
10°	1506.8	1506.8	1494.8	1505.3	1503.8
12.5°	1485.8	1487.3	1478.3	1485.8	1481.3
15°	1463.3	1464.8	1454.2	1463.3	1457.2
17.5°	1434.7	1437.7	1427.2	1434.7	1430.2
20°	1403.2	1406.2	1395.7	1400.2	1400.2
22.5°	1367.1	1373.1	1361.1	1367.1	1362.6
25°	1329.6	1334.1	1325.0	1331.1	1323.5
27.5°	1289.0	1295.0	1284.5	1289.0	1286.0
30°	1242.4	1251.4	1242.4	1245.4	1243.9
32.5°	1200.4	1207.9	1201.9	1204.9	1203.4
35°	1150.8	1161.3	1156.8	1161.3	1161.3
37.5°	1102.7	1111.7	1110.2	1116.2	1114.7
40°	1053.1	1065.1	1063.6	1069.7	1072.7
42.5°	999.0	1015.6	1020.1	1027.6	1027.6
45°	948.0	964.5	972.0	982.5	984.0
47.5°	895.4	910.4	922.4	937.4	940.5
50°	841.3	857.8	874.3	890.9	895.4
52.5°	784.2	805.2	826.3	844.3	847.3
55°	728.6	752.7	776.7	793.2	799.2
57.5°	671.5	700.1	727.1	745.2	749.7
60°	614.4	644.5	674.5	697.1	701.6
62.5°	558.9	588.9	622.0	647.5	653.5
65°	501.8	536.3	572.4	594.9	600.9
67.5°	449.2	482.2	518.3	545.3	552.9
70°	390.6	425.2	464.2	492.8	501.8
72.5°	333.5	369.6	413.1	444.7	450.7
75°	276.4	315.5	363.6	393.6	401.1
77.5°	220.8	265.9	311.0	344.0	350.0
80°	169.8	214.8	265.9	299.0	305.0
82.5°	123.2	171.3	223.8	255.4	267.4
85°	82.6	132.2	184.8	217.8	229.9
87.5°	52.6	100.7	151.7	186.3	196.8
90°	24.0	72.1	123.2	157.7	168.3
92.5°	21.0	64.6	117.2	150.2	160.7
95°	19.5	58.6	109.7	142.7	153.2
97.5°	18.0	54.1	103.7	135.2	145.7
100°	16.5	48.1	96.1	127.7	136.7
102.5°	15.0	43.6	90.1	120.2	129.2
105°	13.5	37.6	82.6	112.7	123.2
107.5°	12.0	33.1	76.6	106.7	115.7
110°	10.5	28.5	70.6	99.2	109.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	10.5	24.0	64.6	91.6	102.2
115°	9.0	19.5	58.6	85.6	94.6
117.5°	7.5	15.0	52.6	78.1	88.6
120°	7.5	12.0	46.6	72.1	81.1
122.5°	6.0	7.5	40.6	64.6	73.6
125°	6.0	4.5	34.6	58.6	66.1
127.5°	4.5	3.0	28.5	51.1	60.1
130°	4.5	3.0	24.0	45.1	52.6
132.5°	3.0	3.0	18.0	39.1	45.1
135°	3.0	1.5	12.0	31.5	39.1
137.5°	3.0	1.5	7.5	25.5	31.5
140°	1.5	1.5	3.0	19.5	25.5
142.5°	1.5	0.0	0.0	13.5	19.5
145°	1.5	0.0	0.0	7.5	13.5
147.5°	0.0	0.0	0.0	3.0	6.0
150°	0.0	0.0	0.0	0.0	1.5
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)