

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: P1004634

Luminaire Tested: S125DR-B610DB40-4F0-XX-W2A-D

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004634
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-B610DB40-4F0-XX-W2A-D
Description: Define 5 Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

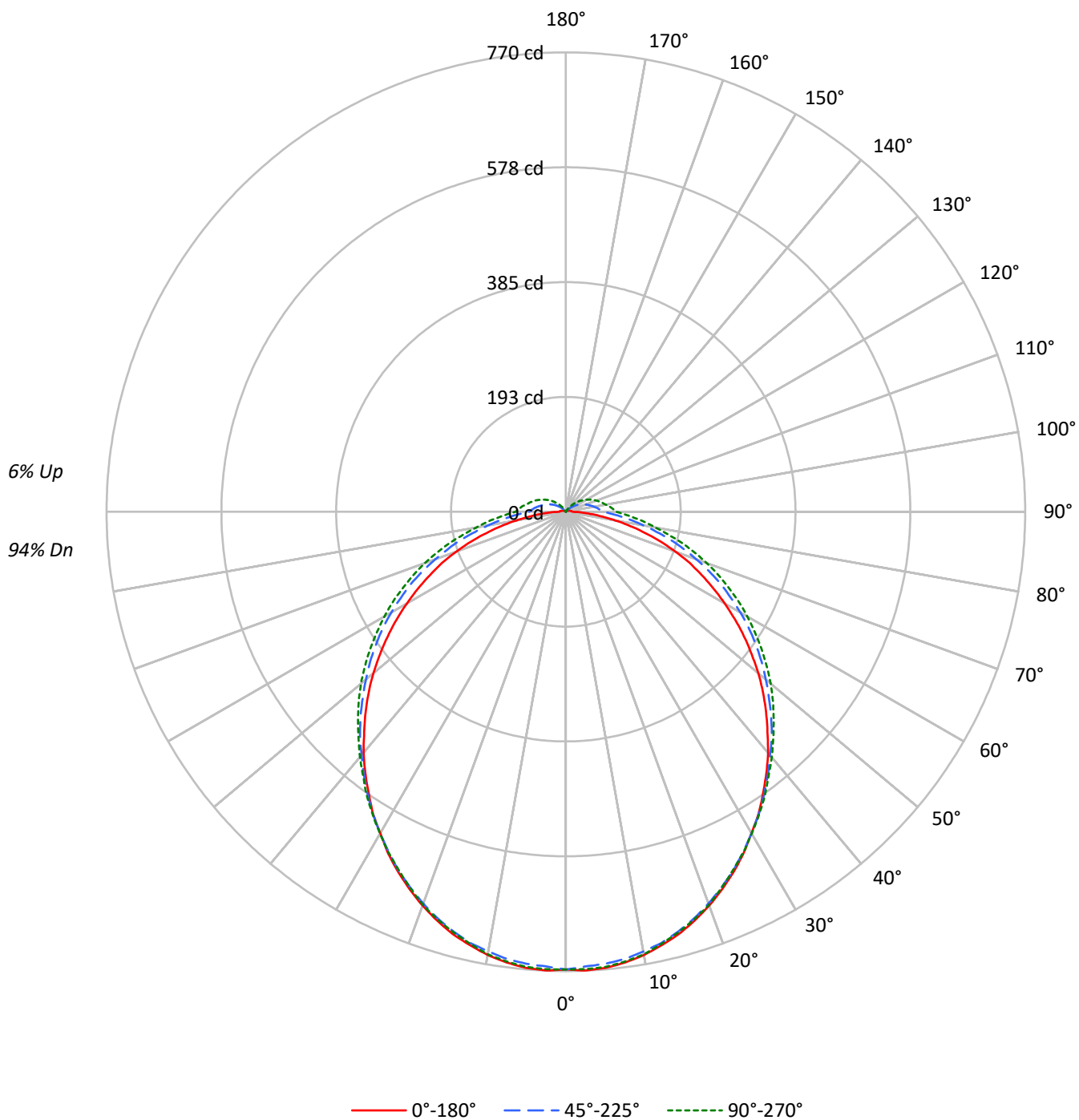
Lumens per Lamp: N/A
Luminaire Lumens: 2377.0 lumens
Efficiency: N/A
Efficacy: 99.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24
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: P1004634

CATALOG NUMBER: S125DR-B610DB40-4F0-XX-W2A-D

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°	4916	4916	4916
5°	4935	4891	4925
10°	4909	4870	4899
15°	4860	4830	4840
20°	4791	4765	4780
25°	4707	4691	4685
30°	4602	4602	4608
35°	4507	4530	4548
40°	4410	4455	4492
45°	4301	4410	4464
50°	4199	4364	4470
55°	4075	4344	4470
60°	3943	4329	4502
65°	3810	4345	4562
70°	3664	4355	4708
75°	3426	4505	4973
80°	3136	4915	5634
85°	3043	6800	8461

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 14468 cd/sqm

TEST NUMBER: P1004634

CATALOG NUMBER: S125DR-B610DB40-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.6	3.1
10°-20°	206.1	8.7
20°-30°	306.5	12.9
30°-40°	363.0	15.3
40°-50°	375.3	15.8
50°-60°	345.7	14.5
60°-70°	279.5	11.8
70°-80°	187.0	7.9
80°-90°	96.7	4.1
90°-100°	54.4	2.3
100°-110°	40.1	1.7
110°-120°	26.9	1.1
120°-130°	15.2	0.6
130°-140°	6.7	0.3
140°-150°	1.3	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	585.2	24.6
0°-40°	948.2	39.9
0°-60°	1669.2	70.2
0°-90°	2232.4	93.9
90°-120°	121.4	5.1
90°-150°	144.6	6.1
90°-180°	145.0	6.1
0°-180°	2377.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	767	767	767	767	767	
5°	767	766	760	767	766	73
15°	733	734	728	733	730	206
25°	666	668	664	666	663	307
35°	576	582	579	582	582	361
45°	475	483	487	492	493	366
55°	365	377	389	397	400	326
65°	251	269	287	298	301	249
75°	138	158	182	197	201	147
85°	41	66	92	109	115	43
90°	12	36	62	79	84	8
95°	10	29	55	72	77	8
105°	7	19	41	56	62	7
115°	4	10	29	43	47	5
125°	3	2	17	29	33	3
135°	2	1	6	16	20	1
145°	1	0	0	4	7	0
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

TEST NUMBER: P1004634

CATALOG NUMBER: S125DR-B610DB40-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	767.3	767.3	767.3	767.3	767.3
2.5°	769.6	768.1	762.8	768.1	767.3
5°	767.3	765.8	760.5	766.6	765.8
7.5°	762.0	761.3	756.0	761.3	760.5
10°	754.5	754.5	748.5	753.8	753.0
12.5°	744.0	744.7	740.2	744.0	741.7
15°	732.7	733.5	728.2	732.7	729.7
17.5°	718.4	719.9	714.7	718.4	716.2
20°	702.6	704.1	698.9	701.1	701.1
22.5°	684.6	687.6	681.6	684.6	682.3
25°	665.8	668.0	663.5	666.5	662.7
27.5°	645.4	648.5	643.2	645.4	643.9
30°	622.1	626.6	622.1	623.6	622.9
32.5°	601.1	604.8	601.8	603.3	602.6
35°	576.2	581.5	579.2	581.5	581.5
37.5°	552.2	556.7	555.9	558.9	558.2
40°	527.3	533.4	532.6	535.6	537.1
42.5°	500.3	508.5	510.8	514.6	514.6
45°	474.7	483.0	486.7	492.0	492.7
47.5°	448.4	455.9	461.9	469.4	470.9
50°	421.3	429.5	437.8	446.1	448.4
52.5°	392.7	403.2	413.7	422.8	424.3
55°	364.8	376.9	388.9	397.2	400.2
57.5°	336.3	350.6	364.1	373.1	375.4
60°	307.7	322.7	337.8	349.1	351.3
62.5°	279.8	294.9	311.4	324.2	327.2
65°	251.3	268.6	286.6	297.9	300.9
67.5°	224.9	241.5	259.5	273.1	276.8
70°	195.6	212.9	232.5	246.7	251.3
72.5°	167.0	185.1	206.9	222.7	225.7
75°	138.4	158.0	182.0	197.1	200.9
77.5°	110.6	133.2	155.7	172.3	175.3
80°	85.0	107.6	133.2	149.7	152.7
82.5°	61.7	85.8	112.1	127.9	133.9
85°	41.4	66.2	92.5	109.1	115.1
87.5°	26.3	50.4	76.0	93.3	98.5
90°	12.0	36.1	61.7	79.0	84.3
92.5°	10.5	32.3	58.7	75.2	80.5
95°	9.8	29.3	54.9	71.5	76.7
97.5°	9.0	27.1	51.9	67.7	73.0
100°	8.3	24.1	48.1	63.9	68.5
102.5°	7.5	21.8	45.1	60.2	64.7
105°	6.8	18.8	41.4	56.4	61.7
107.5°	6.0	16.5	38.4	53.4	57.9
110°	5.3	14.3	35.4	49.6	54.9

TEST NUMBER: P1004634

CATALOG NUMBER: S125DR-B610DB40-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.3	12.0	32.3	45.9	51.2
115°	4.5	9.8	29.3	42.9	47.4
117.5°	3.8	7.5	26.3	39.1	44.4
120°	3.8	6.0	23.3	36.1	40.6
122.5°	3.0	3.8	20.3	32.3	36.9
125°	3.0	2.3	17.3	29.3	33.1
127.5°	2.3	1.5	14.3	25.6	30.1
130°	2.3	1.5	12.0	22.6	26.3
132.5°	1.5	1.5	9.0	19.6	22.6
135°	1.5	0.8	6.0	15.8	19.6
137.5°	1.5	0.8	3.8	12.8	15.8
140°	0.8	0.8	1.5	9.8	12.8
142.5°	0.8	0.0	0.0	6.8	9.8
145°	0.8	0.0	0.0	3.8	6.8
147.5°	0.0	0.0	0.0	1.5	3.0
150°	0.0	0.0	0.0	0.0	0.8
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)