

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: P1004617

Luminaire Tested: S125DR-B610DB2750-4F0-XX-W2A-D_2700K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004617
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-B610DB2750-4F0-XX-W2A-D_2700K
Description: Define 5 Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

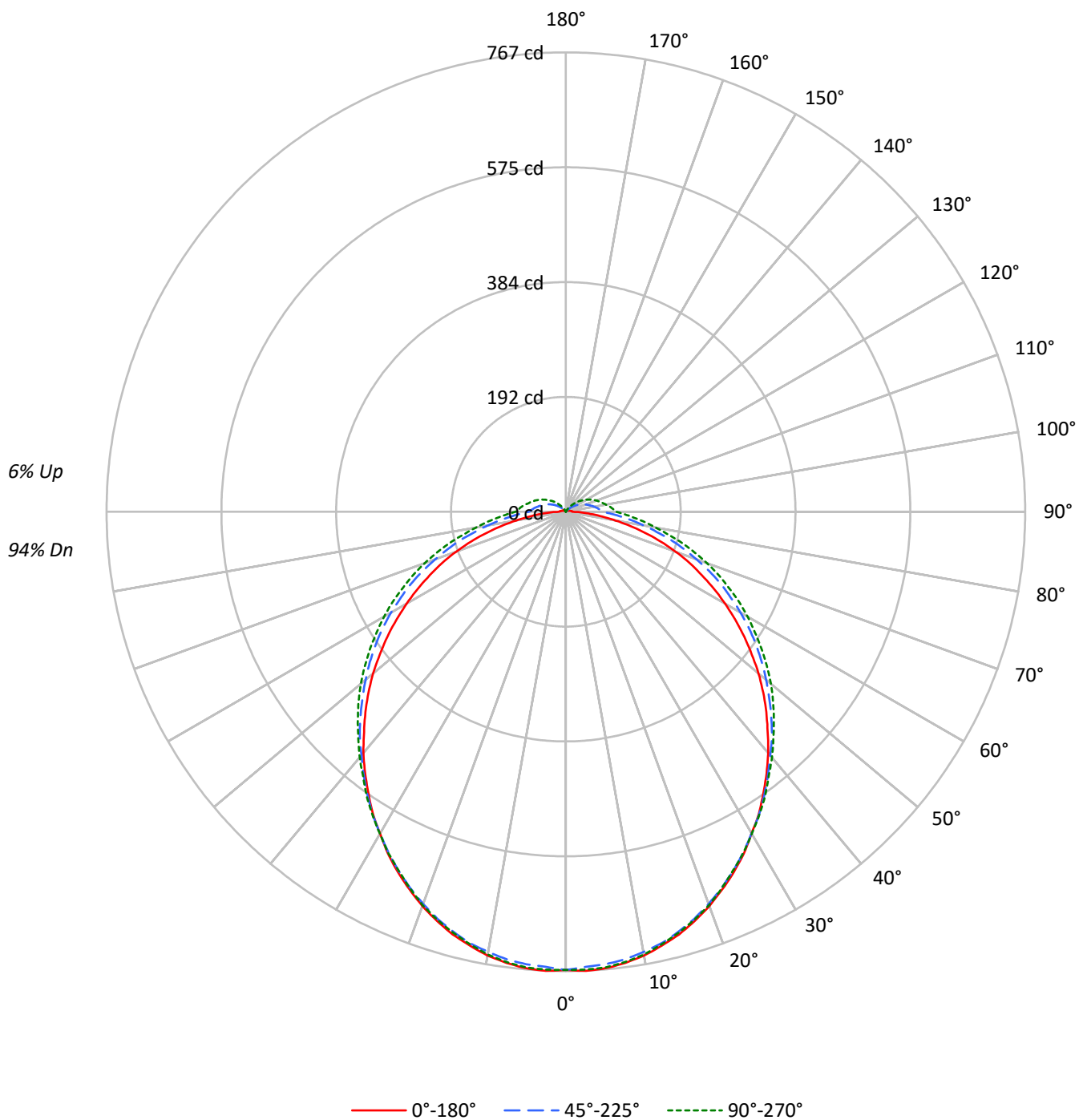
Lumens per Lamp: N/A
Luminaire Lumens: 2370.1 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24
Input Voltage (V): 120
Input Current (A_{in}): 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	50	30	10
RCR																				
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	96	96	94
1	106	101	96	92	103	98	94	90	93	89	86	88	85	82	83	81	79	79	79	76
2	96	88	80	74	93	85	78	73	81	75	70	76	72	68	72	69	65	65	65	63
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55	55	55	53
4	80	68	59	52	77	66	58	51	63	55	50	60	53	48	57	51	47	47	47	45
5	74	60	51	44	71	59	50	44	56	49	43	53	47	42	51	45	41	41	41	39
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36	36	36	34
7	63	49	40	34	61	48	40	34	46	39	33	44	37	33	42	36	32	32	32	30
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29	29	29	27
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	36	30	26	26	26	24
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23	23	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4902	4902	4902
5°	4921	4877	4911
10°	4894	4855	4885
15°	4846	4816	4826
20°	4776	4751	4766
25°	4693	4676	4671
30°	4589	4589	4594
35°	4494	4517	4535
40°	4398	4441	4479
45°	4289	4397	4452
50°	4186	4351	4456
55°	4064	4332	4457
60°	3931	4316	4489
65°	3798	4333	4548
70°	3653	4342	4693
75°	3416	4493	4958
80°	3129	4900	5619
85°	3036	6785	8439

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 14439 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.4	3.1
10°-20°	205.5	8.7
20°-30°	305.6	12.9
30°-40°	361.9	15.3
40°-50°	374.2	15.8
50°-60°	344.7	14.5
60°-70°	278.7	11.8
70°-80°	186.5	7.9
80°-90°	96.4	4.1
90°-100°	54.3	2.3
100°-110°	40.0	1.7
110°-120°	26.8	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°	583.5	24.6
0°-40°	945.4	39.9
0°-60°	1664.3	70.2
0°-90°	2225.8	93.9
90°-120°	121.2	5.1
90°-150°	144.3	6.1
90°-180°	144.0	6.1
0°-180°	2370.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	765	765	765	765	765	
5°	765	764	758	764	764	73
15°	731	731	726	731	728	206
25°	664	666	662	664	661	306
35°	574	580	578	580	580	360
45°	473	482	485	490	491	365
55°	364	376	388	396	399	325
65°	250	268	286	297	300	249
75°	138	158	182	196	200	146
85°	41	66	92	109	115	43
90°	12	36	62	79	84	8
95°	10	29	55	71	76	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

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	765.1	765.1	765.1	765.1	765.1
2.5°	767.3	765.8	760.6	765.8	765.1
5°	765.1	763.6	758.3	764.3	763.6
7.5°	759.8	759.1	753.8	759.1	758.3
10°	752.3	752.3	746.3	751.6	750.8
12.5°	741.8	742.6	738.1	741.8	739.6
15°	730.6	731.3	726.1	730.6	727.6
17.5°	716.3	717.8	712.5	716.3	714.0
20°	700.5	702.0	696.8	699.0	699.0
22.5°	682.5	685.5	679.5	682.5	680.3
25°	663.8	666.0	661.5	664.5	660.8
27.5°	643.5	646.5	641.3	643.5	642.0
30°	620.3	624.8	620.3	621.8	621.0
32.5°	599.3	603.0	600.0	601.5	600.8
35°	574.5	579.8	577.5	579.8	579.8
37.5°	550.5	555.0	554.3	557.3	556.5
40°	525.8	531.8	531.0	534.0	535.5
42.5°	498.8	507.0	509.3	513.0	513.0
45°	473.3	481.5	485.3	490.5	491.3
47.5°	447.0	454.5	460.5	468.0	469.5
50°	420.0	428.3	436.5	444.8	447.0
52.5°	391.5	402.0	412.5	421.5	423.0
55°	363.8	375.8	387.8	396.0	399.0
57.5°	335.3	349.5	363.0	372.0	374.3
60°	306.8	321.8	336.8	348.0	350.3
62.5°	279.0	294.0	310.5	323.3	326.3
65°	250.5	267.8	285.8	297.0	300.0
67.5°	224.3	240.8	258.8	272.3	276.0
70°	195.0	212.3	231.8	246.0	250.5
72.5°	166.5	184.5	206.3	222.0	225.0
75°	138.0	157.5	181.5	196.5	200.3
77.5°	110.3	132.8	155.3	171.8	174.8
80°	84.8	107.3	132.8	149.3	152.3
82.5°	61.5	85.5	111.8	127.5	133.5
85°	41.3	66.0	92.3	108.8	114.8
87.5°	26.3	50.3	75.8	93.0	98.3
90°	12.0	36.0	61.5	78.8	84.0
92.5°	10.5	32.3	58.5	75.0	80.3
95°	9.8	29.3	54.8	71.3	76.5
97.5°	9.0	27.0	51.8	67.5	72.8
100°	8.3	24.0	48.0	63.8	68.3
102.5°	7.5	21.8	45.0	60.0	64.5
105°	6.8	18.8	41.3	56.3	61.5
107.5°	6.0	16.5	38.3	53.3	57.8
110°	5.3	14.3	35.3	49.5	54.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.3	12.0	32.3	45.8	51.0
115°	4.5	9.8	29.3	42.8	47.3
117.5°	3.8	7.5	26.3	39.0	44.3
120°	3.8	6.0	23.3	36.0	40.5
122.5°	3.0	3.8	20.3	32.3	36.8
125°	3.0	2.3	17.3	29.3	33.0
127.5°	2.3	1.5	14.3	25.5	30.0
130°	2.3	1.5	12.0	22.5	26.3
132.5°	1.5	1.5	9.0	19.5	22.5
135°	1.5	0.8	6.0	15.8	19.5
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)