

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: P1004631

Luminaire Tested: S125DR-B610DB35-4F0-XX-W2A-D

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004631
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-B610DB35-4F0-XX-W2A-D
Description: Define 5 Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

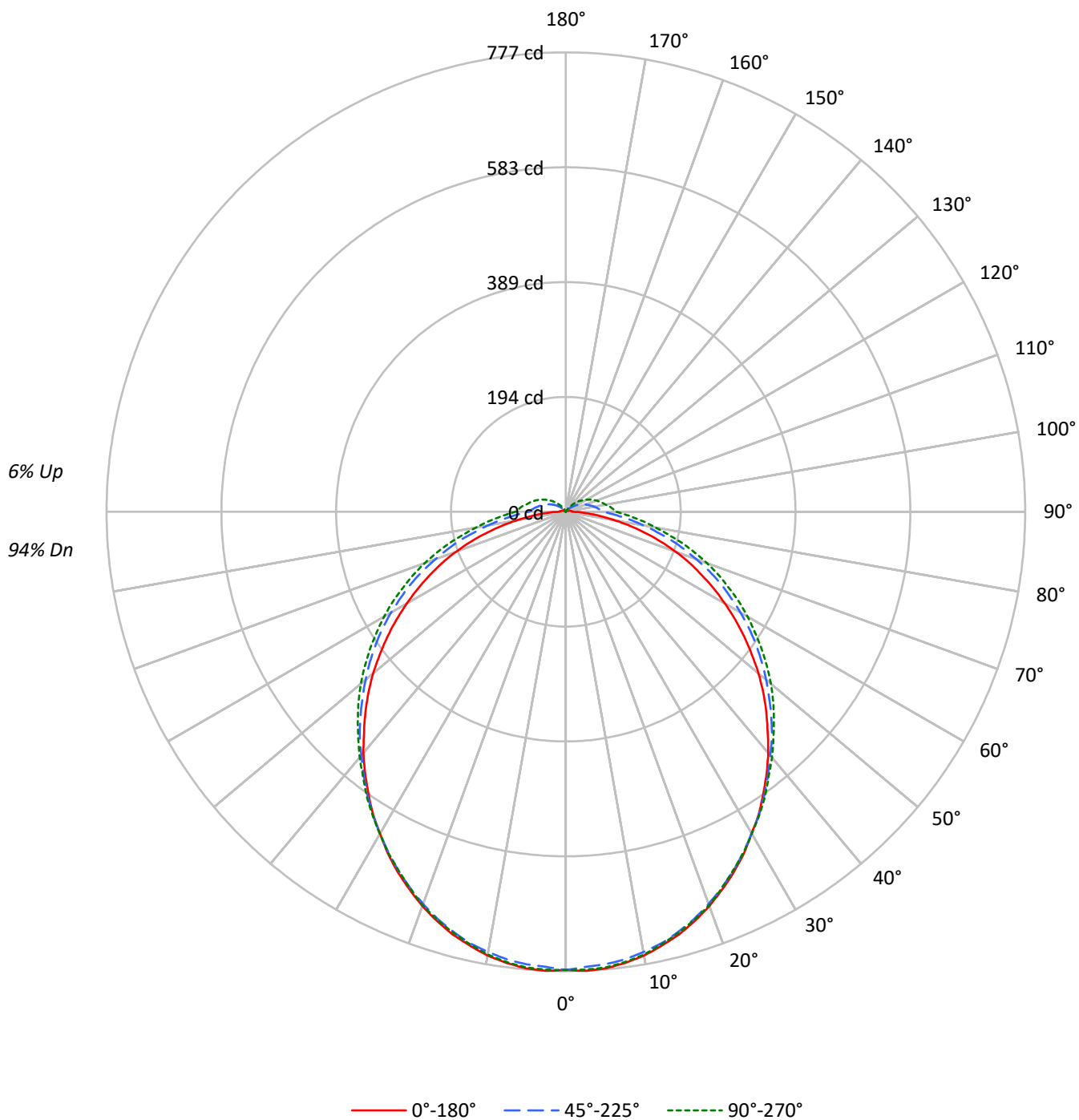
Lumens per Lamp: N/A
Luminaire Lumens: 2401.0 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

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

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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°	4966	4966	4966
5°	4985	4941	4975
10°	4958	4919	4948
15°	4909	4879	4889
20°	4839	4813	4829
25°	4754	4738	4732
30°	4649	4649	4655
35°	4553	4576	4594
40°	4455	4500	4537
45°	4345	4454	4510
50°	4241	4408	4514
55°	4116	4388	4515
60°	3983	4372	4548
65°	3848	4389	4607
70°	3702	4399	4754
75°	3461	4552	5023
80°	3169	4963	5693
85°	3073	6873	8550

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 14615 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.3	3.1
10°-20°	208.2	8.7
20°-30°	309.6	12.9
30°-40°	366.7	15.3
40°-50°	379.1	15.8
50°-60°	349.2	14.5
60°-70°	282.3	11.8
70°-80°	188.9	7.9
80°-90°	97.6	4.1
90°-100°	55.0	2.3
100°-110°	40.5	1.7
110°-120°	27.1	1.1
120°-130°	15.4	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°	591.2	24.6
0°-40°	957.8	39.9
0°-60°	1686.1	70.2
0°-90°	2254.9	93.9
90°-120°	122.7	5.1
90°-150°	146.1	6.1
90°-180°	146.0	6.1
0°-180°	2401.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	775	774	768	774	774	74
15°	740	741	736	740	737	209
25°	672	675	670	673	669	310
35°	582	587	585	587	587	364
45°	480	488	492	497	498	370
55°	368	381	393	401	404	329
65°	254	271	290	301	304	252
75°	140	160	184	199	203	148
85°	42	67	94	110	116	44
90°	12	36	62	80	85	8
95°	10	30	56	72	78	8
105°	7	19	42	57	62	7
115°	5	10	30	43	48	5
125°	3	2	18	30	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°	775.1	775.1	775.1	775.1	775.1
2.5°	777.3	775.8	770.5	775.8	775.1
5°	775.1	773.5	768.2	774.3	773.5
7.5°	769.7	769.0	763.7	769.0	768.2
10°	762.1	762.1	756.1	761.4	760.6
12.5°	751.5	752.3	747.7	751.5	749.2
15°	740.1	740.9	735.5	740.1	737.1
17.5°	725.7	727.2	721.9	725.7	723.4
20°	709.7	711.2	705.9	708.2	708.2
22.5°	691.5	694.5	688.4	691.5	689.2
25°	672.5	674.8	670.2	673.2	669.4
27.5°	652.0	655.0	649.7	652.0	650.4
30°	628.4	633.0	628.4	629.9	629.2
32.5°	607.1	610.9	607.9	609.4	608.6
35°	582.1	587.4	585.1	587.4	587.4
37.5°	557.7	562.3	561.5	564.6	563.8
40°	532.7	538.7	538.0	541.0	542.5
42.5°	505.3	513.7	515.9	519.7	519.7
45°	479.5	487.8	491.6	497.0	497.7
47.5°	452.9	460.5	466.6	474.2	475.7
50°	425.5	433.9	442.2	450.6	452.9
52.5°	396.6	407.3	417.9	427.0	428.6
55°	368.5	380.7	392.8	401.2	404.2
57.5°	339.7	354.1	367.8	376.9	379.2
60°	310.8	326.0	341.2	352.6	354.9
62.5°	282.7	297.9	314.6	327.5	330.5
65°	253.8	271.3	289.5	300.9	303.9
67.5°	227.2	243.9	262.2	275.8	279.6
70°	197.6	215.0	234.8	249.2	253.8
72.5°	168.7	186.9	209.0	224.9	228.0
75°	139.8	159.6	183.9	199.1	202.9
77.5°	111.7	134.5	157.3	174.0	177.0
80°	85.9	108.7	134.5	151.2	154.3
82.5°	62.3	86.6	113.2	129.2	135.3
85°	41.8	66.9	93.5	110.2	116.3
87.5°	26.6	50.9	76.7	94.2	99.5
90°	12.2	36.5	62.3	79.8	85.1
92.5°	10.6	32.7	59.3	76.0	81.3
95°	9.9	29.6	55.5	72.2	77.5
97.5°	9.1	27.4	52.4	68.4	73.7
100°	8.4	24.3	48.6	64.6	69.1
102.5°	7.6	22.0	45.6	60.8	65.3
105°	6.8	19.0	41.8	57.0	62.3
107.5°	6.1	16.7	38.8	54.0	58.5
110°	5.3	14.4	35.7	50.2	55.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.3	12.2	32.7	46.4	51.7
115°	4.6	9.9	29.6	43.3	47.9
117.5°	3.8	7.6	26.6	39.5	44.8
120°	3.8	6.1	23.6	36.5	41.0
122.5°	3.0	3.8	20.5	32.7	37.2
125°	3.0	2.3	17.5	29.6	33.4
127.5°	2.3	1.5	14.4	25.8	30.4
130°	2.3	1.5	12.2	22.8	26.6
132.5°	1.5	1.5	9.1	19.8	22.8
135°	1.5	0.8	6.1	16.0	19.8
137.5°	1.5	0.8	3.8	12.9	16.0
140°	0.8	0.8	1.5	9.9	12.9
142.5°	0.8	0.0	0.0	6.8	9.9
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)