

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: P1004637

Luminaire Tested: S125DR-B610DB50-4F0-XX-W2A-D

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004637
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-B610DB50-4F0-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

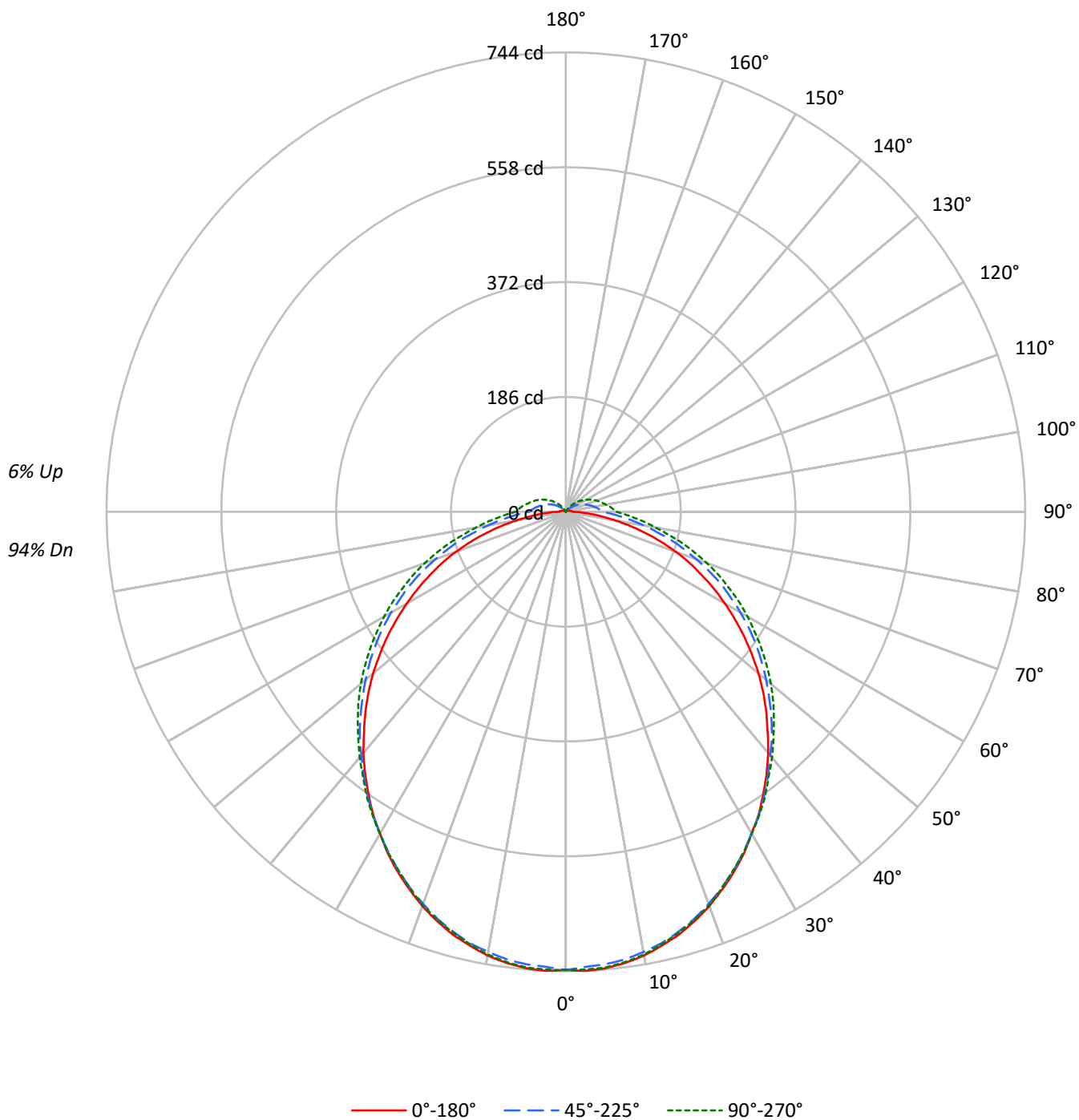
Lumens per Lamp: N/A
Luminaire Lumens: 2299.0 lumens
Efficiency: N/A
Efficacy: 95.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24
Input Voltage (V):
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: P1004637

CATALOG NUMBER: S125DR-B610DB50-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1004637

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4755	4755	4755
5°	4773	4731	4764
10°	4748	4710	4738
15°	4701	4672	4682
20°	4634	4608	4623
25°	4552	4536	4532
30°	4452	4452	4457
35°	4359	4382	4399
40°	4266	4308	4345
45°	4160	4265	4318
50°	4061	4221	4322
55°	3942	4202	4324
60°	3814	4186	4354
65°	3684	4202	4412
70°	3544	4211	4552
75°	3315	4359	4810
80°	3033	4752	5450
85°	2941	6579	8182

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 13998 cd/sqm

TEST NUMBER: P1004637

CATALOG NUMBER: S125DR-B610DB50-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.2	3.1
10°-20°	199.4	8.7
20°-30°	296.5	12.9
30°-40°	351.1	15.3
40°-50°	363.0	15.8
50°-60°	334.4	14.5
60°-70°	270.3	11.8
70°-80°	180.9	7.9
80°-90°	93.5	4.1
90°-100°	52.7	2.3
100°-110°	38.8	1.7
110°-120°	26.0	1.1
120°-130°	14.7	0.6
130°-140°	6.4	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°	566.0	24.6
0°-40°	917.1	39.9
0°-60°	1614.5	70.2
0°-90°	2159.1	93.9
90°-120°	117.5	5.1
90°-150°	139.9	6.1
90°-180°	140.0	6.1
0°-180°	2299.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	742	742	742	742	742	
5°	742	741	736	741	741	70
15°	709	709	704	709	706	200
25°	644	646	642	645	641	296
35°	557	562	560	562	562	349
45°	459	467	471	476	477	354
55°	353	364	376	384	387	315
65°	243	260	277	288	291	241
75°	134	153	176	191	194	142
85°	40	64	90	106	111	42
90°	12	35	60	76	82	8
95°	10	28	53	69	74	7
105°	6	18	40	55	60	7
115°	4	10	28	42	46	4
125°	3	2	17	28	32	2
135°	2	1	6	15	19	1
145°	1	0	0	4	6	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: P1004637

CATALOG NUMBER: S125DR-B610DB50-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	742.1	742.1	742.1	742.1	742.1
2.5°	744.3	742.9	737.8	742.9	742.1
5°	742.1	740.7	735.6	741.4	740.7
7.5°	737.0	736.3	731.2	736.3	735.6
10°	729.8	729.8	723.9	729.0	728.3
12.5°	719.6	720.3	715.9	719.6	717.4
15°	708.7	709.4	704.3	708.7	705.8
17.5°	694.8	696.3	691.2	694.8	692.7
20°	679.6	681.0	675.9	678.1	678.1
22.5°	662.1	665.0	659.2	662.1	659.9
25°	643.9	646.1	641.7	644.6	641.0
27.5°	624.3	627.2	622.1	624.3	622.8
30°	601.7	606.1	601.7	603.2	602.4
32.5°	581.3	585.0	582.1	583.5	582.8
35°	557.3	562.4	560.2	562.4	562.4
37.5°	534.0	538.4	537.7	540.6	539.9
40°	510.0	515.9	515.1	518.0	519.5
42.5°	483.8	491.8	494.0	497.7	497.7
45°	459.1	467.1	470.7	475.8	476.6
47.5°	433.6	440.9	446.7	454.0	455.5
50°	407.4	415.4	423.5	431.5	433.6
52.5°	379.8	390.0	400.2	408.9	410.4
55°	352.9	364.5	376.2	384.2	387.1
57.5°	325.2	339.1	352.1	360.9	363.1
60°	297.6	312.1	326.7	337.6	339.8
62.5°	270.7	285.2	301.2	313.6	316.5
65°	243.0	259.7	277.2	288.1	291.0
67.5°	217.5	233.6	251.0	264.1	267.8
70°	189.2	205.9	224.8	238.6	243.0
72.5°	161.5	179.0	200.1	215.4	218.3
75°	133.9	152.8	176.1	190.6	194.3
77.5°	107.0	128.8	150.6	166.6	169.5
80°	82.2	104.0	128.8	144.8	147.7
82.5°	59.7	82.9	108.4	123.7	129.5
85°	40.0	64.0	89.5	105.5	111.3
87.5°	25.5	48.7	73.5	90.2	95.3
90°	11.6	34.9	59.7	76.4	81.5
92.5°	10.2	31.3	56.8	72.8	77.9
95°	9.5	28.4	53.1	69.1	74.2
97.5°	8.7	26.2	50.2	65.5	70.6
100°	8.0	23.3	46.6	61.8	66.2
102.5°	7.3	21.1	43.7	58.2	62.6
105°	6.5	18.2	40.0	54.6	59.7
107.5°	5.8	16.0	37.1	51.7	56.0
110°	5.1	13.8	34.2	48.0	53.1

TEST NUMBER: P1004637

CATALOG NUMBER: S125DR-B610DB50-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.1	11.6	31.3	44.4	49.5
115°	4.4	9.5	28.4	41.5	45.8
117.5°	3.6	7.3	25.5	37.8	42.9
120°	3.6	5.8	22.6	34.9	39.3
122.5°	2.9	3.6	19.6	31.3	35.7
125°	2.9	2.2	16.7	28.4	32.0
127.5°	2.2	1.5	13.8	24.7	29.1
130°	2.2	1.5	11.6	21.8	25.5
132.5°	1.5	1.5	8.7	18.9	21.8
135°	1.5	0.7	5.8	15.3	18.9
137.5°	1.5	0.7	3.6	12.4	15.3
140°	0.7	0.7	1.5	9.5	12.4
142.5°	0.7	0.0	0.0	6.5	9.5
145°	0.7	0.0	0.0	3.6	6.5
147.5°	0.0	0.0	0.0	1.5	2.9
150°	0.0	0.0	0.0	0.0	0.7
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)