

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1062145

Luminaire Tested: S125RDR-H610D940-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062145
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H610D940-X4F0-XX-UDD-BVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

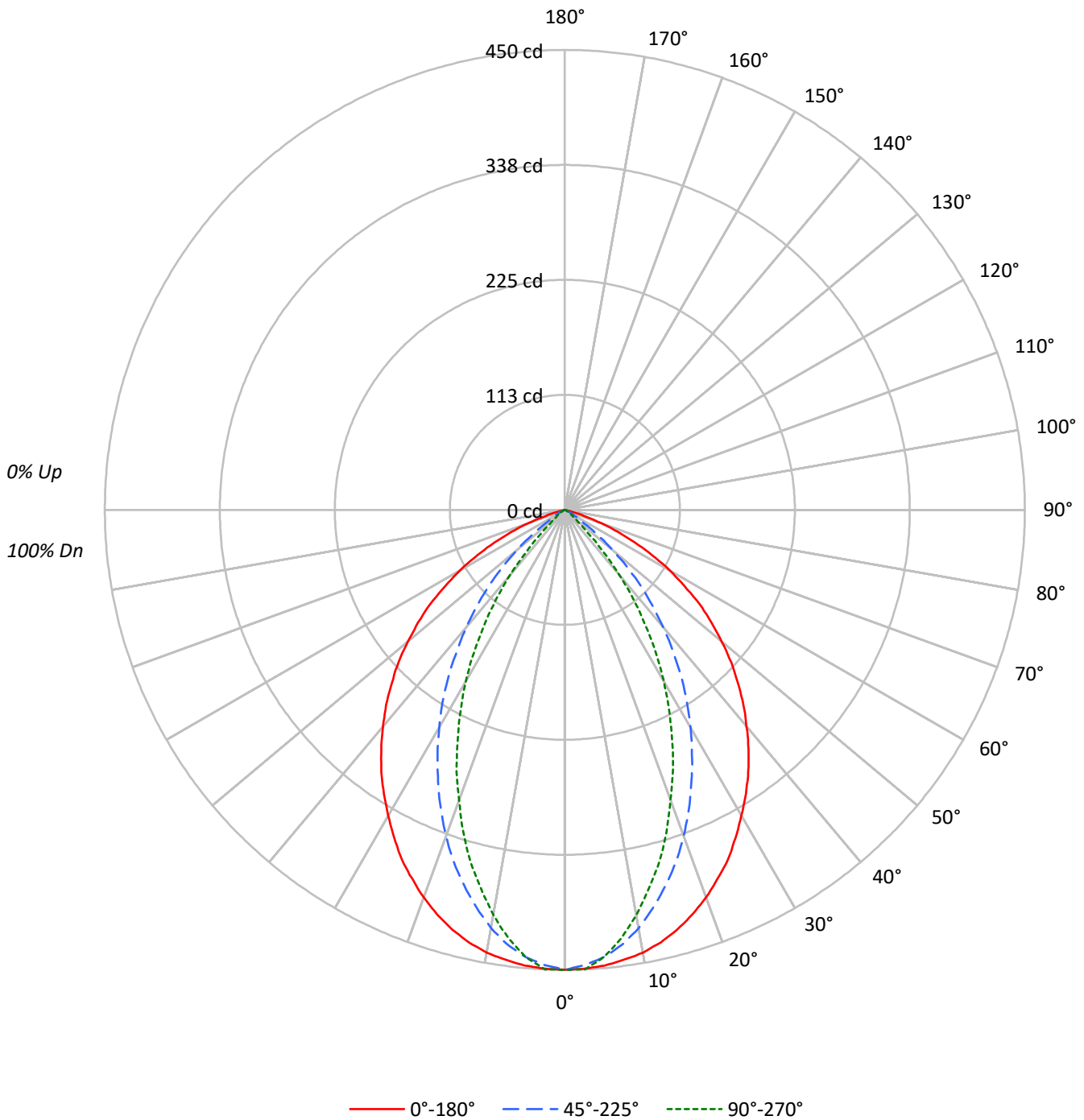
Lumens per Lamp: N/A
Luminaire Lumens: 581.3 lumens
Efficiency: N/A
Efficacy: 33.4 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
Input Voltage (V): 120
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: P1062145

CATALOG NUMBER: S125RDR-H610D940-X4F0-XX-UDD-BVL-B

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3098	3098	3098
5°	3094	3036	3036
10°	3076	2906	2814
15°	3030	2712	2543
20°	2958	2488	2214
25°	2869	2228	1886
30°	2747	1954	1538
35°	2630	1667	1152
40°	2486	1345	747
45°	2329	1018	323
50°	2143	649	121
55°	1931	284	85
60°	1635	123	58
65°	1238	77	29
70°	753	36	12
75°	157	16	16
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2329 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.5	7.1
10°-20°	108.1	18.6
20°-30°	138.8	23.9
30°-40°	130.7	22.5
40°-50°	91.4	15.7
50°-60°	48.8	8.4
60°-70°	19.5	3.3
70°-80°	2.5	0.4
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	288.5	49.6
0°-40°	419.2	72.1
0°-60°	559.3	96.2
0°-90°	581.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	581.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	450	450	450	450	450	
5°	448	446	439	440	439	42
15°	425	411	380	363	357	120
25°	378	344	293	261	248	173
35°	313	263	198	153	137	195
45°	239	179	104	50	33	185
55°	161	98	24	8	7	143
65°	76	30	5	2	2	76
75°	6	2	1	1	1	12
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	450.0	450.0	450.0	450.0	450.0
2.5°	449.4	450.0	445.8	449.4	450.0
5°	447.6	446.4	439.3	440.5	439.3
7.5°	444.1	441.1	429.2	425.1	422.7
10°	439.9	433.4	415.6	406.7	402.5
12.5°	433.4	423.9	398.9	385.3	379.4
15°	425.1	411.4	380.5	362.7	356.8
17.5°	415.0	397.2	361.5	339.6	330.7
20°	403.7	379.9	339.6	313.5	302.2
22.5°	390.6	363.3	317.0	287.9	276.6
25°	377.6	344.3	293.3	261.2	248.2
27.5°	361.5	324.7	269.5	235.1	220.8
30°	345.5	305.1	245.8	208.4	193.5
32.5°	329.5	284.4	222.0	180.5	165.6
35°	312.9	263.0	198.3	153.2	137.1
37.5°	295.1	241.6	172.8	127.0	110.4
40°	276.6	220.8	149.6	101.5	83.1
42.5°	258.8	200.1	126.5	76.6	56.4
45°	239.2	179.3	104.5	50.5	33.2
47.5°	220.8	159.1	81.9	29.1	17.2
50°	200.1	138.3	60.6	15.4	11.3
52.5°	180.5	118.1	40.4	10.1	8.9
55°	160.9	98.5	23.7	8.3	7.1
57.5°	138.3	79.6	13.1	6.5	5.3
60°	118.7	62.3	8.9	4.7	4.2
62.5°	96.2	45.7	6.5	3.6	3.0
65°	76.0	30.3	4.7	2.4	1.8
67.5°	56.4	17.8	3.0	1.2	1.2
70°	37.4	9.5	1.8	0.6	0.6
72.5°	19.6	4.2	1.2	0.6	0.6
75°	5.9	1.8	0.6	0.6	0.6
77.5°	0.0	0.6	0.0	0.0	0.6
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	12.88	14.14	13.24	14.45	14.77	0.00	0.00	0.00	0.00	0.00
	3H	13.46	14.57	13.84	14.90	15.27	0.00	0.00	0.00	0.00	0.00
	4H	13.42	14.45	13.83	14.81	15.19	0.00	0.00	0.00	0.00	0.00
	6H	13.34	14.28	13.75	14.65	15.05	0.00	0.00	0.00	0.00	0.00
	8H	13.29	14.18	13.72	14.58	14.98	0.00	0.00	0.00	0.00	0.00
	12H	13.25	14.10	13.68	14.48	14.91	0.00	0.00	0.00	0.00	0.00
4H	2H	12.65	13.68	13.05	14.03	14.42	0.00	0.00	0.00	0.00	0.00
	3H	13.24	14.07	13.65	14.48	14.88	0.00	0.00	0.00	0.00	0.00
	4H	13.19	13.93	13.62	14.35	14.80	0.00	0.00	0.00	0.00	0.00
	6H	13.10	13.74	13.57	14.19	14.66	0.00	0.00	0.00	0.00	0.00
	8H	13.04	13.64	13.51	14.08	14.56	0.00	0.00	0.00	0.00	0.00
	12H	12.99	13.51	13.48	14.00	14.47	0.00	0.00	0.00	0.00	0.00
8H	4H	13.04	13.64	13.51	14.08	14.56	0.00	0.00	0.00	0.00	0.00
	6H	12.94	13.42	13.44	13.91	14.40	0.00	0.00	0.00	0.00	0.00
	8H	12.87	13.30	13.39	13.82	14.31	0.00	0.00	0.00	0.00	0.00
	12H	12.82	13.20	13.34	13.70	14.27	0.00	0.00	0.00	0.00	0.00
12H	4H	12.99	13.51	13.48	14.00	14.47	0.00	0.00	0.00	0.00	0.00
	6H	12.87	13.30	13.39	13.82	14.31	0.00	0.00	0.00	0.00	0.00
	8H	12.82	13.20	13.34	13.70	14.27	0.00	0.00	0.00	0.00	0.00