

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: P1062089

Luminaire Tested: S125RDR-H610D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062089
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H610D830-X4F0-XX-UDD-WVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

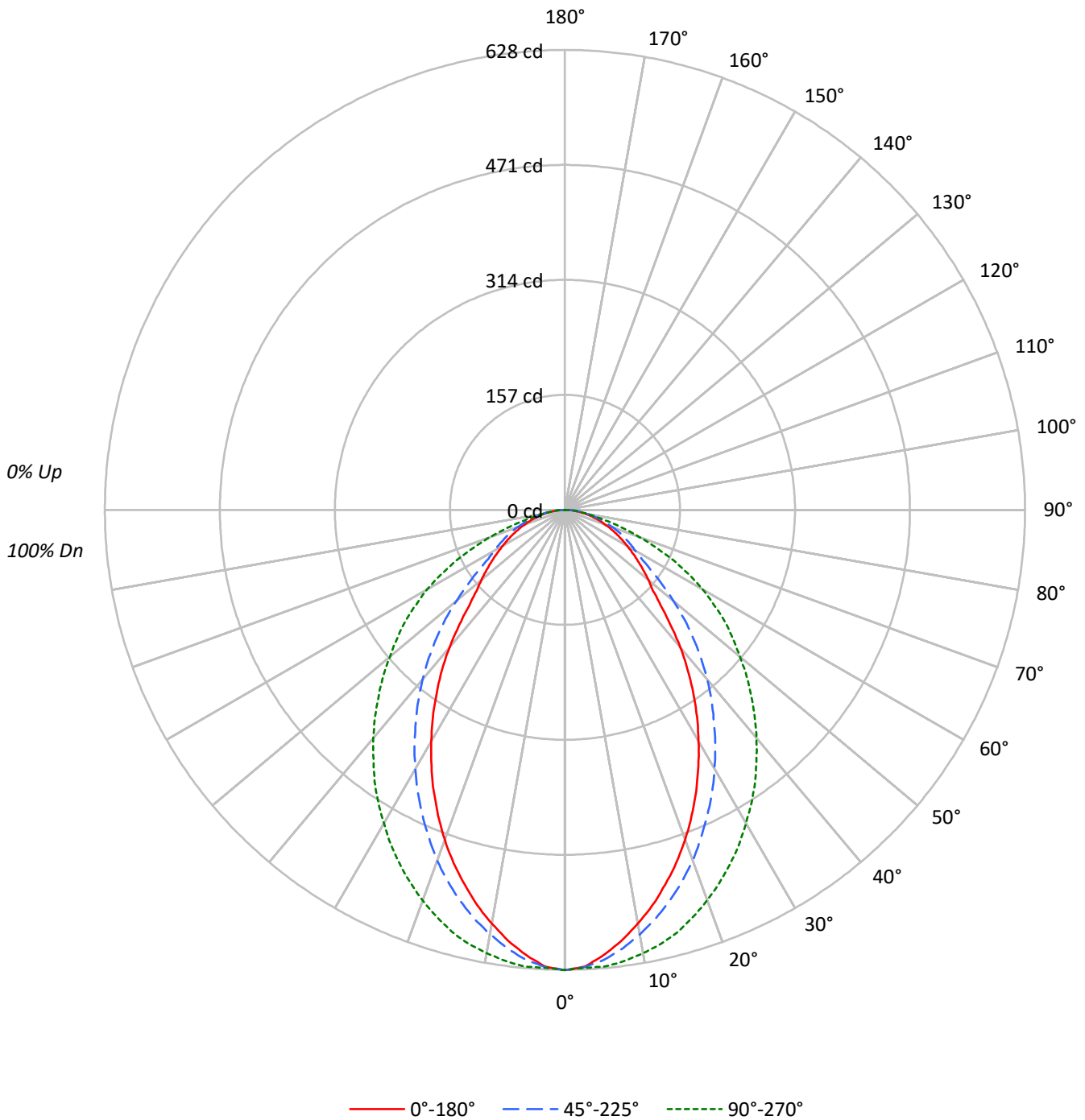
Lumens per Lamp: N/A
Luminaire Lumens: 1178.1 lumens
Efficiency: N/A
Efficacy: 67.7 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

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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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86				86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74				74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64				64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56				56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				50
6	74	62	54	48	72	61	53	48	59	52	47	58	52	47	56	51	46	44				44
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				40
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36				36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33				33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30				30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4327	4327	4327
5°	4217	4261	4326
10°	4012	4113	4297
15°	3773	3938	4251
20°	3515	3735	4159
25°	3220	3496	4055
30°	2900	3245	3928
35°	2564	2981	3805
40°	2201	2714	3656
45°	1797	2415	3502
50°	1594	2072	3342
55°	1462	1718	3203
60°	1348	1522	2983
65°	1258	1463	2659
70°	1176	1391	2174
75°	1085	1304	1604
80°	1019	1221	1170
85°	940	1193	995

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3502 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.2	4.9
10°-20°	156.7	13.3
20°-30°	215.3	18.3
30°-40°	228.2	19.4
40°-50°	199.2	16.9
50°-60°	151.3	12.8
60°-70°	101.4	8.6
70°-80°	52.3	4.4
80°-90°	15.7	1.3
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°	430.1	36.5
0°-40°	658.3	55.9
0°-60°	1008.8	85.6
0°-90°	1178.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1178.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	628	628	628	628	628	
5°	610	616	616	621	626	57
15°	529	539	552	577	596	148
25°	424	437	460	498	534	194
35°	305	323	355	405	453	190
45°	185	203	248	307	360	146
55°	122	126	143	210	267	109
65°	77	79	90	120	163	77
75°	41	43	49	52	60	44
85°	12	15	15	14	13	13
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	628.5	628.5	628.5	628.5	628.5
2.5°	624.1	628.5	624.7	624.7	625.9
5°	610.2	616.5	616.5	620.9	625.9
7.5°	593.3	600.2	604.0	614.0	621.5
10°	573.8	581.4	588.3	603.3	614.6
12.5°	553.1	561.3	571.9	591.4	607.1
15°	529.3	539.3	552.5	577.0	596.4
17.5°	505.4	515.4	531.8	560.6	582.6
20°	479.7	490.3	509.8	541.2	567.6
22.5°	452.0	464.0	484.7	520.5	551.2
25°	423.8	437.0	460.2	498.5	533.7
27.5°	394.3	410.0	435.1	475.9	514.8
30°	364.8	380.5	408.1	452.7	494.1
32.5°	335.3	352.2	382.3	429.4	474.0
35°	305.1	322.7	354.7	404.9	452.7
37.5°	275.6	293.2	329.0	381.1	429.4
40°	244.9	263.1	302.0	356.6	406.8
42.5°	213.5	232.9	275.0	331.5	383.6
45°	184.6	202.8	248.0	307.0	359.7
47.5°	163.2	175.2	221.0	281.9	336.5
50°	148.8	155.1	193.4	257.4	312.0
52.5°	134.4	139.4	167.6	232.3	288.8
55°	121.8	125.6	143.1	210.3	266.8
57.5°	109.2	113.0	124.3	188.3	241.1
60°	97.9	101.1	110.5	165.1	216.6
62.5°	87.3	89.8	99.8	143.1	190.2
65°	77.2	79.1	89.8	119.9	163.2
67.5°	67.2	69.1	79.7	97.9	134.4
70°	58.4	59.0	69.1	79.7	108.0
72.5°	49.6	50.2	58.4	64.7	82.9
75°	40.8	43.3	49.0	52.1	60.3
77.5°	33.3	36.4	39.6	40.8	40.8
80°	25.7	29.5	30.8	30.8	29.5
82.5°	18.8	22.0	22.6	21.3	20.1
85°	11.9	15.1	15.1	13.8	12.6
87.5°	5.7	8.2	8.2	7.5	5.7
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	11.70	13.19	12.06	13.51	13.82	15.62	17.12	15.99	17.43	17.75
	3H	13.27	14.61	13.65	14.94	15.30	17.05	18.39	17.42	18.72	19.08
	4H	13.88	15.14	14.28	15.49	15.87	17.46	18.72	17.86	19.07	19.45
	6H	14.38	15.54	14.79	15.91	16.30	17.68	18.84	18.09	19.21	19.60
	8H	14.55	15.66	14.98	16.05	16.45	17.74	18.84	18.16	19.23	19.63
	12H	14.67	15.73	15.10	16.11	16.54	17.77	18.83	18.20	19.21	19.64
4H	2H	12.43	13.69	12.83	14.04	14.42	15.75	17.01	16.15	17.36	17.74
	3H	14.21	15.26	14.62	15.66	16.06	17.36	18.40	17.77	18.80	19.21
	4H	14.95	15.89	15.38	16.30	16.74	17.89	18.83	18.32	19.24	19.68
	6H	15.58	16.40	16.04	16.84	17.30	18.23	19.05	18.69	19.49	19.95
	8H	15.81	16.58	16.28	17.02	17.49	18.33	19.09	18.79	19.54	20.00
	12H	15.98	16.67	16.47	17.15	17.62	18.40	19.08	18.88	19.56	20.03
8H	4H	15.35	16.11	15.81	16.56	17.03	17.99	18.76	18.46	19.20	19.67
	6H	16.14	16.77	16.63	17.26	17.74	18.43	19.06	18.93	19.56	20.03
	8H	16.46	17.03	16.97	17.54	18.02	18.59	19.16	19.10	19.67	20.16
	12H	16.73	17.23	17.24	17.73	18.29	18.73	19.23	19.24	19.72	20.28
12H	4H	15.39	16.08	15.88	16.55	17.03	17.99	18.68	18.48	19.16	19.63
	6H	16.22	16.79	16.73	17.30	17.78	18.45	19.02	18.96	19.53	20.01
	8H	16.61	17.11	17.12	17.61	18.17	18.66	19.16	19.17	19.65	20.22