

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: P1062105

Luminaire Tested: S125RDR-H610D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062105
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H610D840-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

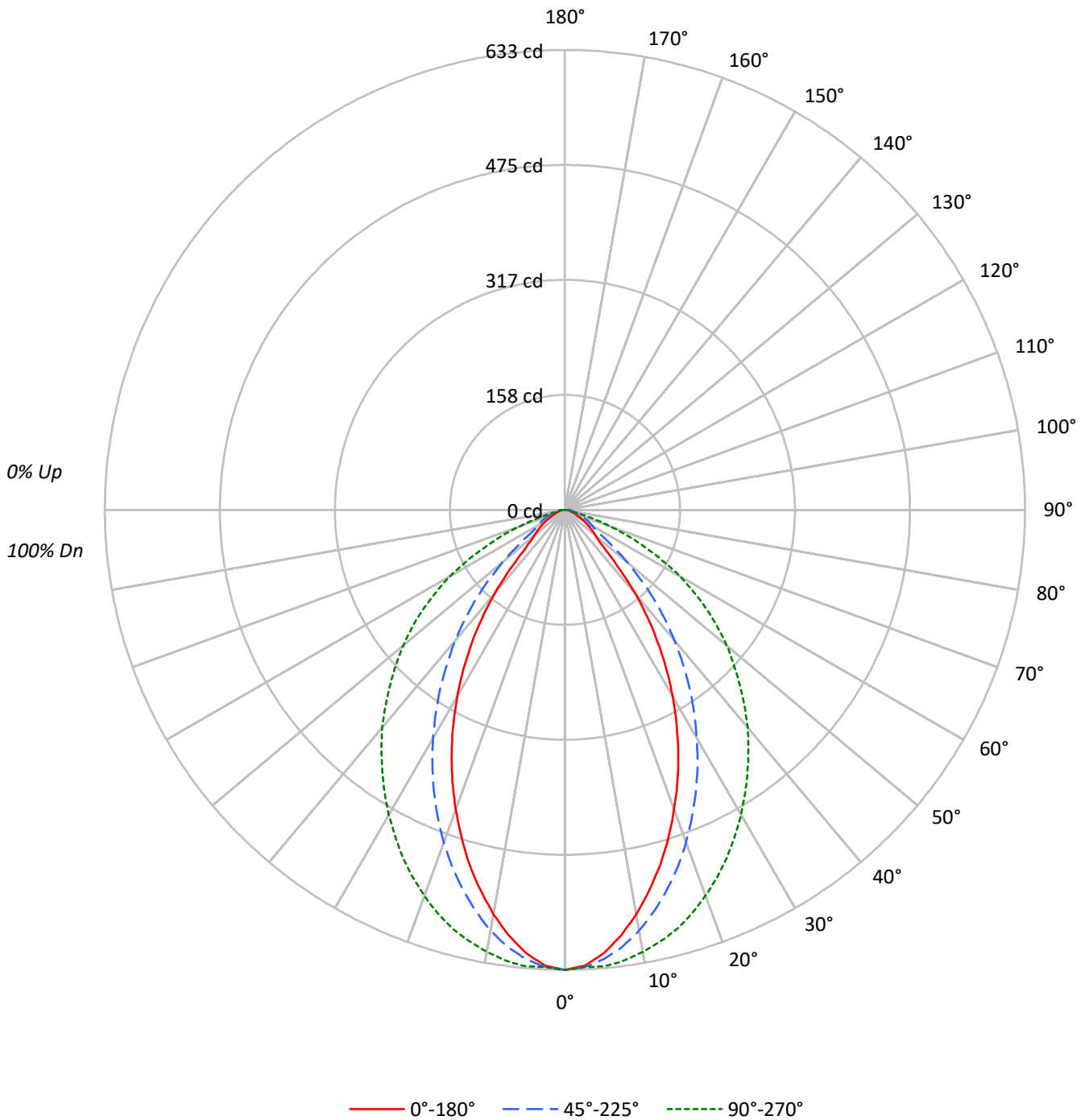
Lumens per Lamp: N/A
Luminaire Lumens: 917.2 lumens
Efficiency: N/A
Efficacy: 52.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56				56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4360	4360	4360
5°	4233	4289	4358
10°	3952	4112	4319
15°	3608	3861	4255
20°	3215	3570	4142
25°	2802	3241	4008
30°	2354	2884	3852
35°	1872	2506	3682
40°	1349	2105	3514
45°	799	1671	3309
50°	591	1189	3114
55°	501	735	2851
60°	408	594	2512
65°	318	547	1984
70°	272	475	1327
75°	250	412	537
80°	266	428	373
85°	316	640	427

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3309 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.4	6.4
10°-20°	153.3	16.7
20°-30°	200.3	21.8
30°-40°	195.2	21.3
40°-50°	146.4	16.0
50°-60°	91.8	10.0
60°-70°	47.8	5.2
70°-80°	17.3	1.9
80°-90°	6.8	0.7
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°	412.0	44.9
0°-40°	607.2	66.2
0°-60°	845.3	92.2
0°-90°	917.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	917.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	633	633	633	633	633	
5°	612	620	620	625	630	57
15°	506	521	542	575	597	141
25°	369	389	427	484	528	169
35°	223	246	298	378	438	138
45°	82	106	172	265	340	69
55°	42	44	61	160	238	37
65°	20	21	34	65	122	20
75°	9	13	16	16	20	10
85°	4	7	8	7	5	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	633.2	633.2	633.2	633.2	633.2
2.5°	627.9	633.9	629.9	629.9	629.9
5°	612.4	620.5	620.5	625.2	630.5
7.5°	590.8	600.3	606.3	617.8	625.8
10°	565.3	576.7	588.1	607.0	617.8
12.5°	536.3	549.8	565.9	592.2	608.3
15°	506.1	520.9	541.7	575.4	596.9
17.5°	473.1	490.6	515.5	555.8	582.1
20°	438.8	456.3	487.2	533.0	565.3
22.5°	404.4	423.3	456.9	508.7	547.1
25°	368.8	389.0	426.6	484.5	527.6
27.5°	332.4	353.3	395.0	459.6	506.1
30°	296.1	317.6	362.7	432.7	484.5
32.5°	259.8	282.6	330.4	405.1	461.6
35°	222.7	246.3	298.1	377.5	438.1
37.5°	187.1	210.6	265.8	349.3	414.5
40°	150.1	175.6	234.2	321.0	391.0
42.5°	113.7	140.0	202.6	292.7	365.4
45°	82.1	106.3	171.6	265.1	339.8
47.5°	63.3	76.7	140.0	236.9	314.9
50°	55.2	59.2	111.0	210.6	290.7
52.5°	47.8	50.5	83.4	186.4	264.5
55°	41.7	43.7	61.2	160.2	237.5
57.5°	35.0	37.7	48.5	134.6	210.0
60°	29.6	31.0	43.1	111.0	182.4
62.5°	24.2	25.6	38.4	87.5	151.4
65°	19.5	20.9	33.6	64.6	121.8
67.5°	16.2	16.8	28.3	45.8	93.5
70°	13.5	14.1	23.6	31.6	65.9
72.5°	11.4	13.5	18.8	22.9	41.7
75°	9.4	12.8	15.5	16.2	20.2
77.5°	8.1	12.1	12.8	12.8	11.4
80°	6.7	10.1	10.8	10.1	9.4
82.5°	5.4	8.1	8.7	8.7	7.4
85°	4.0	6.7	8.1	7.4	5.4
87.5°	2.7	6.1	6.7	6.1	4.0
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	5.04	6.39	5.40	6.70	7.02	14.65	16.00	15.01	16.31	16.63
	3H	5.89	7.10	6.27	7.42	7.79	15.49	16.69	15.87	17.02	17.38
	4H	6.32	7.44	6.72	7.79	8.17	15.56	16.68	15.96	17.03	17.41
	6H	6.74	7.77	7.16	8.14	8.54	15.54	16.57	15.96	16.94	17.34
	8H	6.92	7.90	7.35	8.29	8.69	15.53	16.51	15.96	16.90	17.30
	12H	7.08	8.02	7.52	8.40	8.83	15.52	16.45	15.95	16.83	17.27
4H	2H	6.00	7.12	6.40	7.47	7.85	14.51	15.63	14.91	15.98	16.36
	3H	7.05	7.97	7.46	8.37	8.77	15.42	16.34	15.83	16.74	17.14
	4H	7.61	8.43	8.05	8.85	9.29	15.52	16.34	15.96	16.76	17.20
	6H	8.21	8.92	8.67	9.36	9.83	15.55	16.26	16.01	16.70	17.17
	8H	8.45	9.11	8.92	9.56	10.03	15.55	16.21	16.02	16.66	17.13
	12H	8.67	9.26	9.16	9.74	10.22	15.56	16.15	16.05	16.63	17.10
8H	4H	8.08	8.75	8.55	9.19	9.66	15.45	16.11	15.92	16.55	17.03
	6H	8.90	9.44	9.40	9.93	10.41	15.50	16.04	16.00	16.54	17.02
	8H	9.28	9.76	9.80	10.28	10.77	15.53	16.02	16.05	16.53	17.03
	12H	9.67	10.10	10.18	10.59	11.16	15.60	16.03	16.11	16.52	17.09
12H	4H	8.14	8.72	8.62	9.20	9.68	15.41	16.00	15.90	16.48	16.95
	6H	9.02	9.51	9.54	10.02	10.51	15.47	15.95	15.99	16.47	16.96
	8H	9.51	9.94	10.02	10.43	11.00	15.54	15.97	16.05	16.46	17.03