

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: P1062143

Luminaire Tested: S125RDR-H610D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062143
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-H610D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

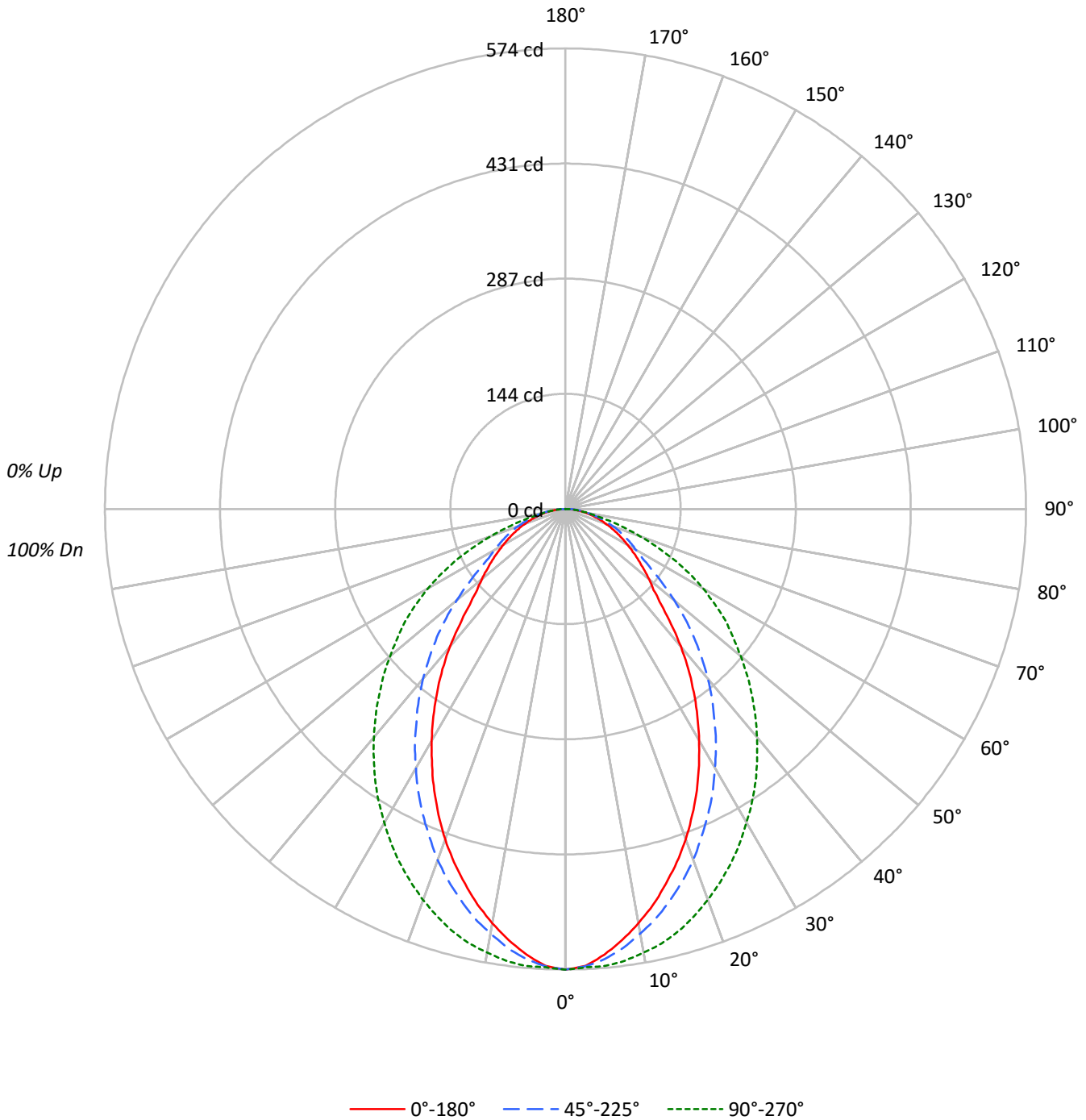
Lumens per Lamp: N/A
Luminaire Lumens: 1076.2 lumens
Efficiency: N/A
Efficacy: 61.9 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	3953	3953	3953
5°	3853	3893	3952
10°	3665	3757	3926
15°	3446	3598	3883
20°	3211	3412	3799
25°	2941	3194	3704
30°	2649	2964	3589
35°	2343	2723	3476
40°	2011	2480	3340
45°	1642	2205	3200
50°	1456	1892	3053
55°	1336	1570	2925
60°	1232	1389	2725
65°	1149	1336	2429
70°	1073	1270	1985
75°	992	1189	1466
80°	932	1114	1071
85°	861	1090	908

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3200 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.1	4.9
10°-20°	143.1	13.3
20°-30°	196.7	18.3
30°-40°	208.4	19.4
40°-50°	181.9	16.9
50°-60°	138.2	12.8
60°-70°	92.6	8.6
70°-80°	47.8	4.4
80°-90°	14.3	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°	392.9	36.5
0°-40°	601.3	55.9
0°-60°	921.5	85.6
0°-90°	1076.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1076.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	574	574	574	574	574	
5°	558	563	563	567	572	52
15°	484	493	505	527	545	136
25°	387	399	420	455	488	177
35°	279	295	324	370	414	174
45°	169	185	226	280	329	133
55°	111	115	131	192	244	100
65°	70	72	82	110	149	70
75°	37	40	45	48	55	40
85°	11	14	14	13	12	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	574.1	574.1	574.1	574.1	574.1
2.5°	570.1	574.1	570.6	570.6	571.8
5°	557.5	563.2	563.2	567.2	571.8
7.5°	542.0	548.3	551.7	560.9	567.8
10°	524.2	531.1	537.4	551.1	561.5
12.5°	505.3	512.7	522.5	540.2	554.6
15°	483.5	492.6	504.7	527.1	544.8
17.5°	461.7	470.9	485.8	512.1	532.2
20°	438.2	447.9	465.7	494.4	518.5
22.5°	412.9	423.8	442.7	475.4	503.5
25°	387.1	399.2	420.4	455.4	487.5
27.5°	360.2	374.5	397.4	434.7	470.3
30°	333.2	347.5	372.8	413.5	451.4
32.5°	306.3	321.7	349.3	392.3	433.0
35°	278.7	294.8	324.0	369.9	413.5
37.5°	251.8	267.8	300.5	348.1	392.3
40°	223.7	240.3	275.9	325.8	371.6
42.5°	195.0	212.8	251.2	302.8	350.4
45°	168.6	185.2	226.5	280.4	328.6
47.5°	149.1	160.0	201.9	257.5	307.4
50°	135.9	141.7	176.6	235.1	285.0
52.5°	122.7	127.3	153.1	212.2	263.8
55°	111.3	114.7	130.8	192.1	243.7
57.5°	99.8	103.2	113.6	172.1	220.2
60°	89.5	92.3	100.9	150.8	197.9
62.5°	79.7	82.0	91.2	130.8	173.8
65°	70.5	72.3	82.0	109.5	149.1
67.5°	61.4	63.1	72.8	89.5	122.7
70°	53.3	53.9	63.1	72.8	98.6
72.5°	45.3	45.9	53.3	59.1	75.7
75°	37.3	39.6	44.7	47.6	55.1
77.5°	30.4	33.3	36.1	37.3	37.3
80°	23.5	27.0	28.1	28.1	27.0
82.5°	17.2	20.1	20.6	19.5	18.4
85°	10.9	13.8	13.8	12.6	11.5
87.5°	5.2	7.5	7.5	6.9	5.2
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	11.38	12.88	11.75	13.19	13.50	15.31	16.81	15.68	17.12	17.44
	3H	12.95	14.30	13.33	14.62	14.99	16.73	18.07	17.11	18.40	18.76
	4H	13.57	14.83	13.97	15.17	15.55	17.15	18.41	17.55	18.75	19.13
	6H	14.06	15.22	14.47	15.59	15.98	17.36	18.53	17.78	18.89	19.29
	8H	14.24	15.34	14.66	15.73	16.13	17.42	18.53	17.85	18.92	19.32
	12H	14.36	15.42	14.79	15.80	16.23	17.46	18.52	17.89	18.90	19.33
4H	2H	12.12	13.38	12.52	13.73	14.10	15.44	16.70	15.84	17.04	17.42
	3H	13.90	14.94	14.31	15.34	15.74	17.05	18.09	17.46	18.49	18.89
	4H	14.63	15.57	15.07	15.99	16.43	17.57	18.51	18.01	18.93	19.37
	6H	15.27	16.09	15.73	16.53	16.99	17.92	18.73	18.37	19.18	19.64
	8H	15.50	16.26	15.96	16.71	17.18	18.02	18.78	18.48	19.22	19.69
	12H	15.67	16.36	16.16	16.83	17.31	18.09	18.77	18.57	19.25	19.72
8H	4H	15.03	15.80	15.50	16.24	16.71	17.68	18.44	18.14	18.89	19.36
	6H	15.82	16.45	16.32	16.94	17.42	18.12	18.75	18.62	19.24	19.72
	8H	16.15	16.71	16.66	17.22	17.71	18.28	18.84	18.79	19.35	19.84
	12H	16.42	16.92	16.93	17.41	17.98	18.41	18.91	18.92	19.41	19.97
12H	4H	15.08	15.76	15.56	16.24	16.71	17.68	18.36	18.16	18.84	19.31
	6H	15.90	16.47	16.42	16.98	17.47	18.13	18.70	18.65	19.21	19.70
	8H	16.30	16.80	16.81	17.29	17.86	18.34	18.84	18.85	19.34	19.90