

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: P1062116

Luminaire Tested: S125RDR-H610D850-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062116
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-H610D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

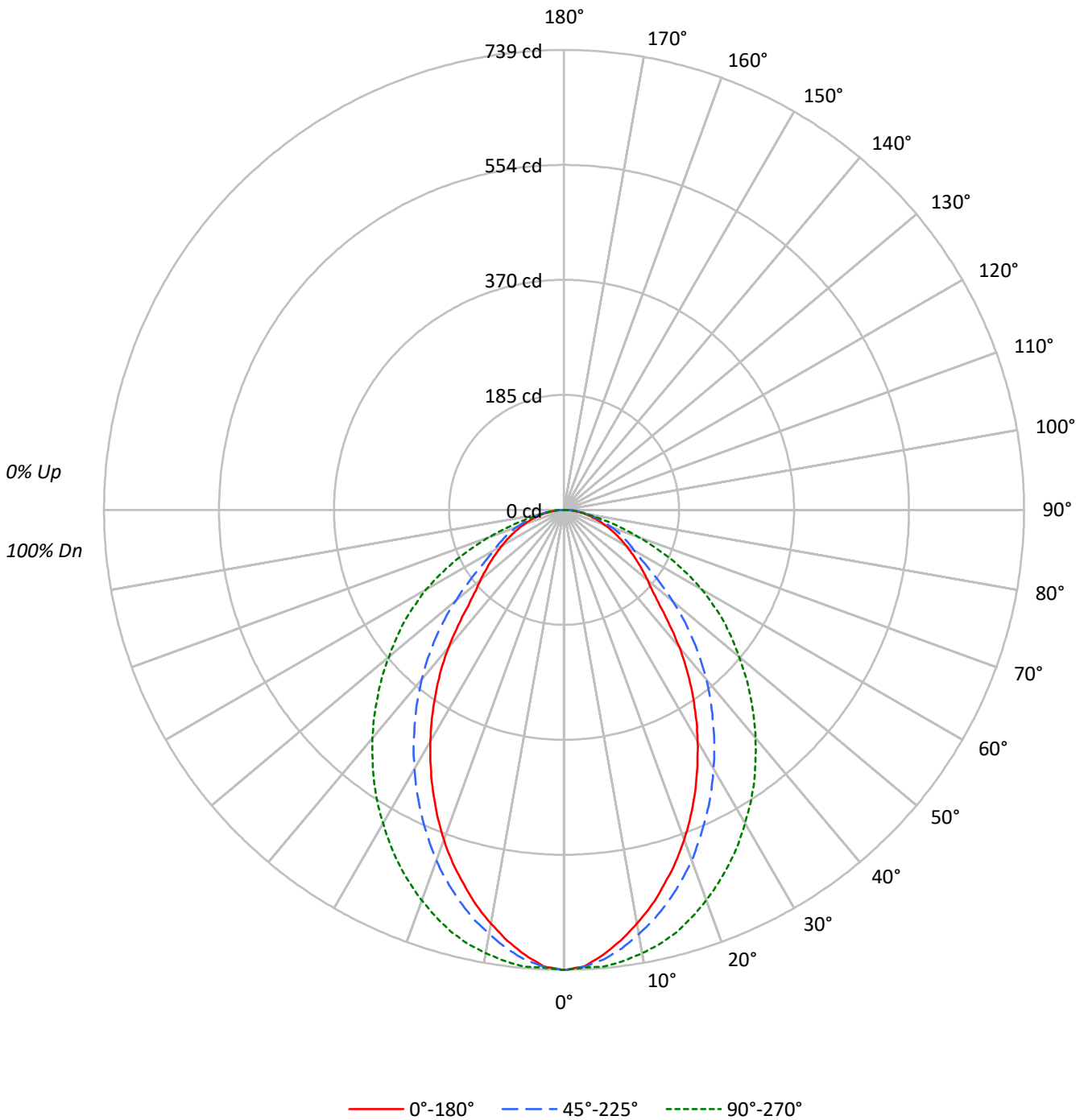
Lumens per Lamp: N/A
Luminaire Lumens: 1386.2 lumens
Efficiency: N/A
Efficacy: 79.7 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	5091	5091	5091
5°	4962	5014	5090
10°	4721	4839	5056
15°	4439	4634	5003
20°	4135	4395	4893
25°	3788	4114	4770
30°	3412	3818	4622
35°	3018	3508	4477
40°	2589	3193	4303
45°	2115	2841	4122
50°	1876	2437	3932
55°	1720	2021	3768
60°	1586	1790	3510
65°	1481	1720	3130
70°	1383	1637	2559
75°	1277	1532	1886
80°	1201	1435	1376
85°	1106	1398	1169

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4122 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.4	4.9
10°-20°	184.3	13.3
20°-30°	253.3	18.3
30°-40°	268.5	19.4
40°-50°	234.4	16.9
50°-60°	178.0	12.8
60°-70°	119.3	8.6
70°-80°	61.5	4.4
80°-90°	18.4	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°	506.1	36.5
0°-40°	774.6	55.9
0°-60°	1187.0	85.6
0°-90°	1386.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1386.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	739	739	739	739	739	
5°	718	725	725	731	736	67
15°	623	634	650	679	702	175
25°	499	514	542	586	628	229
35°	359	380	417	476	533	224
45°	217	239	292	361	423	172
55°	143	148	168	248	314	128
65°	91	93	106	141	192	90
75°	48	51	58	61	71	51
85°	14	18	18	16	15	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	739.4	739.4	739.4	739.4	739.4
2.5°	734.3	739.4	735.0	735.0	736.5
5°	718.0	725.4	725.4	730.6	736.5
7.5°	698.1	706.2	710.6	722.5	731.3
10°	675.2	684.0	692.2	709.9	723.2
12.5°	650.8	660.4	673.0	695.9	714.3
15°	622.7	634.5	650.1	678.9	701.8
17.5°	594.7	606.5	625.7	659.7	685.5
20°	564.4	576.9	599.8	636.8	667.8
22.5°	531.9	545.9	570.3	612.4	648.6
25°	498.6	514.1	541.5	586.5	627.9
27.5°	463.9	482.4	511.9	559.9	605.7
30°	429.2	447.7	480.2	532.6	581.4
32.5°	394.5	414.4	449.9	505.3	557.7
35°	359.0	379.7	417.4	476.5	532.6
37.5°	324.3	345.0	387.1	448.4	505.3
40°	288.1	309.5	355.3	419.6	478.7
42.5°	251.2	274.1	323.6	390.0	451.3
45°	217.2	238.6	291.8	361.2	423.3
47.5°	192.1	206.1	260.0	331.7	395.9
50°	175.1	182.5	227.5	302.9	367.1
52.5°	158.1	164.0	197.2	273.3	339.8
55°	143.3	147.7	168.4	247.5	313.9
57.5°	128.5	133.0	146.3	221.6	283.7
60°	115.2	118.9	130.0	194.3	254.9
62.5°	102.7	105.6	117.5	168.4	223.8
65°	90.9	93.1	105.6	141.1	192.1
67.5°	79.0	81.3	93.8	115.2	158.1
70°	68.7	69.4	81.3	93.8	127.1
72.5°	58.4	59.1	68.7	76.1	97.5
75°	48.0	51.0	57.6	61.3	70.9
77.5°	39.2	42.8	46.5	48.0	48.0
80°	30.3	34.7	36.2	36.2	34.7
82.5°	22.2	25.9	26.6	25.1	23.6
85°	14.0	17.7	17.7	16.3	14.8
87.5°	6.6	9.6	9.6	8.9	6.6
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	12.26	13.76	12.63	14.07	14.39	16.19	17.69	16.55	18.00	18.31
	3H	13.83	15.18	14.21	15.50	15.87	17.61	18.95	17.99	19.28	19.64
	4H	14.45	15.71	14.85	16.05	16.43	18.03	19.28	18.43	19.63	20.01
	6H	14.94	16.10	15.35	16.47	16.86	18.24	19.40	18.65	19.77	20.16
	8H	15.12	16.22	15.54	16.61	17.01	18.30	19.41	18.73	19.80	20.20
	12H	15.24	16.30	15.67	16.68	17.11	18.33	19.39	18.77	19.78	20.21
4H	2H	13.00	14.26	13.40	14.61	14.99	16.32	17.57	16.72	17.92	18.30
	3H	14.78	15.82	15.19	16.22	16.62	17.92	18.97	18.34	19.37	19.77
	4H	15.51	16.45	15.95	16.87	17.31	18.45	19.39	18.88	19.81	20.25
	6H	16.15	16.97	16.61	17.41	17.87	18.79	19.61	19.25	20.05	20.52
	8H	16.38	17.14	16.84	17.59	18.05	18.89	19.66	19.36	20.10	20.57
	12H	16.55	17.23	17.03	17.71	18.18	18.97	19.65	19.45	20.13	20.60
8H	4H	15.91	16.68	16.38	17.12	17.59	18.56	19.32	19.02	19.77	20.24
	6H	16.70	17.33	17.20	17.82	18.30	19.00	19.63	19.49	20.12	20.60
	8H	17.02	17.59	17.54	18.10	18.59	19.15	19.72	19.67	20.23	20.72
	12H	17.30	17.80	17.81	18.29	18.86	19.29	19.79	19.80	20.28	20.85
12H	4H	15.96	16.64	16.44	17.12	17.59	18.56	19.24	19.04	19.72	20.19
	6H	16.78	17.35	17.30	17.86	18.35	19.01	19.58	19.53	20.09	20.58
	8H	17.18	17.68	17.69	18.17	18.74	19.22	19.72	19.73	20.21	20.78