

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: P1061877

Luminaire Tested: S125RDR-H1090D927-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061877
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1090D927-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

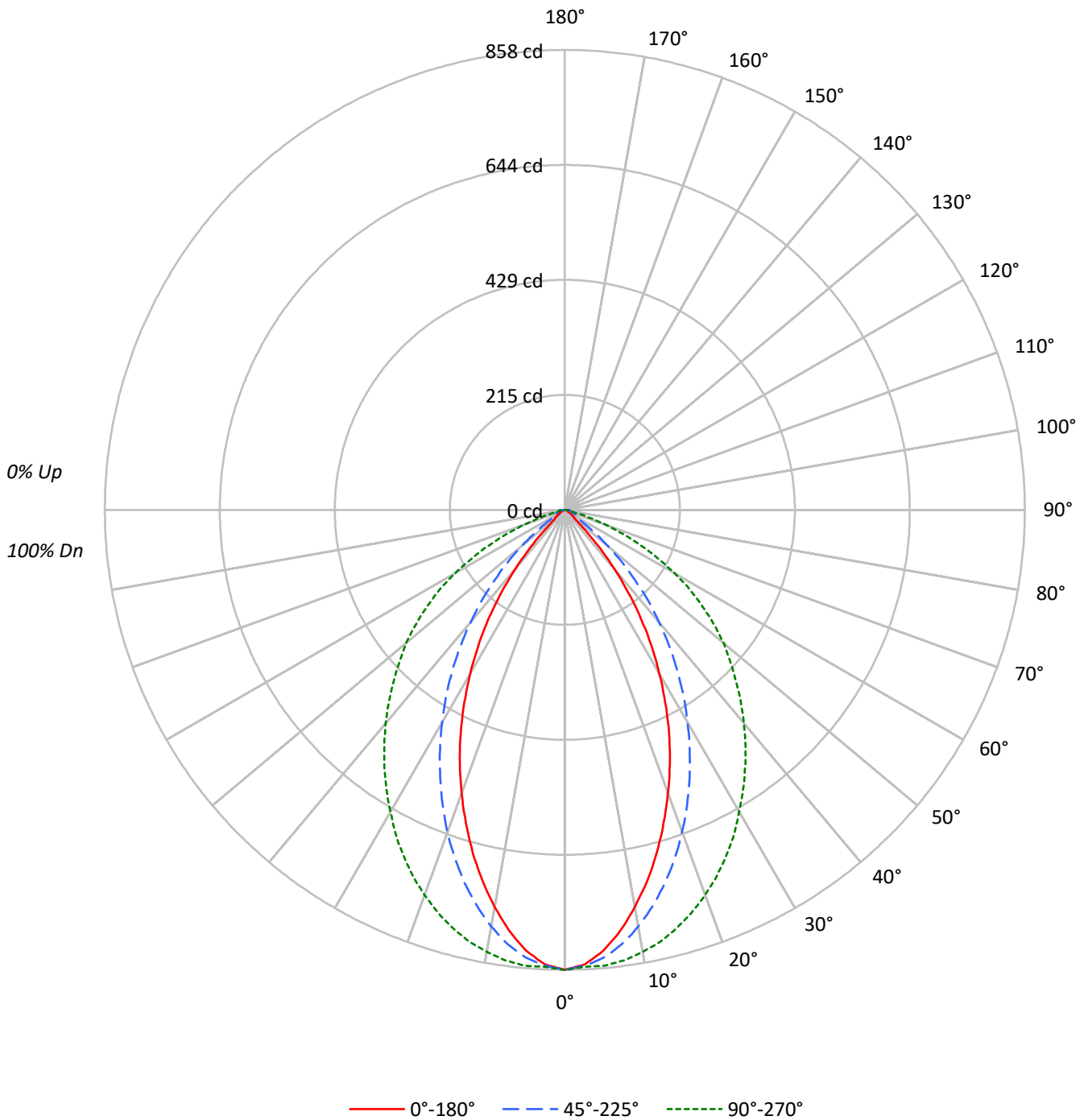
Lumens per Lamp: N/A
Luminaire Lumens: 1110.3 lumens
Efficiency: N/A
Efficacy: 35.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90			90	
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80			80	
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72			72	
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65			65	
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59			59	
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53			53	
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49			49	
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45			45	
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41			41	
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38			38	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5909	5909	5909
5°	5708	5793	5898
10°	5260	5520	5853
15°	4724	5139	5757
20°	4122	4688	5604
25°	3492	4180	5411
30°	2805	3639	5170
35°	2076	3070	4929
40°	1285	2451	4671
45°	501	1792	4391
50°	235	1124	4137
55°	172	480	3755
60°	118	342	3257
65°	78	357	2532
70°	76	326	1592
75°	101	330	508
80°	151	377	341
85°	229	750	529

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4391 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.7	7.1
10°-20°	203.9	18.4
20°-30°	259.7	23.4
30°-40°	241.7	21.8
40°-50°	166.4	15.0
50°-60°	94.2	8.5
60°-70°	44.5	4.0
70°-80°	13.9	1.3
80°-90°	7.3	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°	542.3	48.8
0°-40°	784.1	70.6
0°-60°	1044.7	94.1
0°-90°	1110.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1110.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	858	858	858	858	858	
5°	826	837	838	846	853	76
15°	663	685	721	775	808	185
25°	460	489	550	643	712	210
35°	247	281	365	490	586	153
45°	52	82	184	333	451	48
55°	14	16	40	192	313	13
65°	5	6	22	69	155	5
75°	4	9	12	13	19	4
85°	3	8	10	9	7	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	858.2	858.2	858.2	858.2	858.2
2.5°	848.7	857.3	851.5	852.5	853.4
5°	825.8	837.2	838.2	845.8	853.4
7.5°	792.4	806.7	817.2	835.3	847.7
10°	752.4	769.5	789.5	819.1	837.2
12.5°	709.4	729.5	757.1	799.1	824.8
15°	662.7	684.7	720.9	775.2	807.7
17.5°	613.1	637.9	681.8	746.6	787.6
20°	562.6	589.3	639.8	714.2	764.8
22.5°	512.1	539.7	596.0	678.9	740.0
25°	459.6	489.2	550.2	642.7	712.3
27.5°	406.2	436.7	504.4	605.5	682.8
30°	352.8	385.2	457.7	567.4	650.3
32.5°	300.4	332.8	411.9	529.2	618.9
35°	247.0	281.3	365.2	490.1	586.4
37.5°	193.6	230.8	319.4	450.1	553.1
40°	143.0	178.3	272.7	411.0	519.7
42.5°	95.4	129.7	230.8	371.9	485.4
45°	51.5	82.0	184.0	332.8	451.0
47.5°	27.7	43.9	144.0	294.7	417.7
50°	21.9	24.8	104.9	259.4	386.2
52.5°	18.1	20.0	68.7	226.0	350.0
55°	14.3	16.2	40.0	191.7	312.8
57.5°	11.4	13.3	25.7	159.2	276.5
60°	8.6	10.5	24.8	127.8	236.5
62.5°	6.7	7.6	22.9	98.2	194.5
65°	4.8	5.7	21.9	68.7	155.4
67.5°	3.8	4.8	20.0	43.9	116.3
70°	3.8	3.8	16.2	28.6	79.1
72.5°	3.8	6.7	14.3	19.1	47.7
75°	3.8	8.6	12.4	13.3	19.1
77.5°	3.8	9.5	10.5	10.5	10.5
80°	3.8	8.6	9.5	9.5	8.6
82.5°	3.8	7.6	8.6	9.5	7.6
85°	2.9	7.6	9.5	8.6	6.7
87.5°	2.9	7.6	8.6	7.6	4.8
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	0.00	0.00	0.00	0.00	0.00	15.42	16.71	15.78	17.02	17.33
	3H	0.00	0.00	0.00	0.00	0.00	16.14	17.28	16.52	17.61	17.97
	4H	0.00	0.00	0.00	0.00	0.27	16.16	17.22	16.56	17.57	17.96
	6H	0.00	0.71	0.15	1.08	1.48	16.11	17.09	16.53	17.46	17.85
	8H	0.38	1.30	0.81	1.69	2.10	16.09	17.01	16.52	17.40	17.81
	12H	0.97	1.86	1.41	2.24	2.67	16.07	16.95	16.50	17.34	17.77
4H	2H	0.00	0.97	0.31	1.33	1.71	15.21	16.27	15.61	16.62	17.00
	3H	0.73	1.59	1.14	2.00	2.40	15.96	16.83	16.38	17.24	17.64
	4H	1.74	2.52	2.18	2.93	3.38	15.99	16.77	16.43	17.19	17.63
	6H	3.02	3.69	3.48	4.13	4.60	15.97	16.64	16.43	17.08	17.55
	8H	3.60	4.22	4.07	4.67	5.14	15.95	16.58	16.42	17.03	17.50
	12H	4.16	4.71	4.65	5.20	5.67	15.96	16.51	16.45	17.00	17.47
8H	4H	3.16	3.78	3.63	4.23	4.70	15.88	16.50	16.35	16.95	17.42
	6H	4.72	5.23	5.22	5.72	6.20	15.86	16.37	16.37	16.87	17.35
	8H	5.51	5.97	6.03	6.48	6.97	15.88	16.33	16.40	16.85	17.34
	12H	6.35	6.75	6.86	7.25	7.82	15.94	16.34	16.45	16.84	17.41
12H	4H	3.38	3.93	3.86	4.41	4.89	15.83	16.38	16.32	16.87	17.34
	6H	5.09	5.55	5.61	6.06	6.55	15.82	16.27	16.34	16.79	17.28
	8H	6.08	6.48	6.59	6.97	7.55	15.87	16.27	16.38	16.76	17.34