

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061858

Luminaire Tested: S125RDRP-H1090D840-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061858
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-H1090D840-X4F0-XX-UDD-BVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

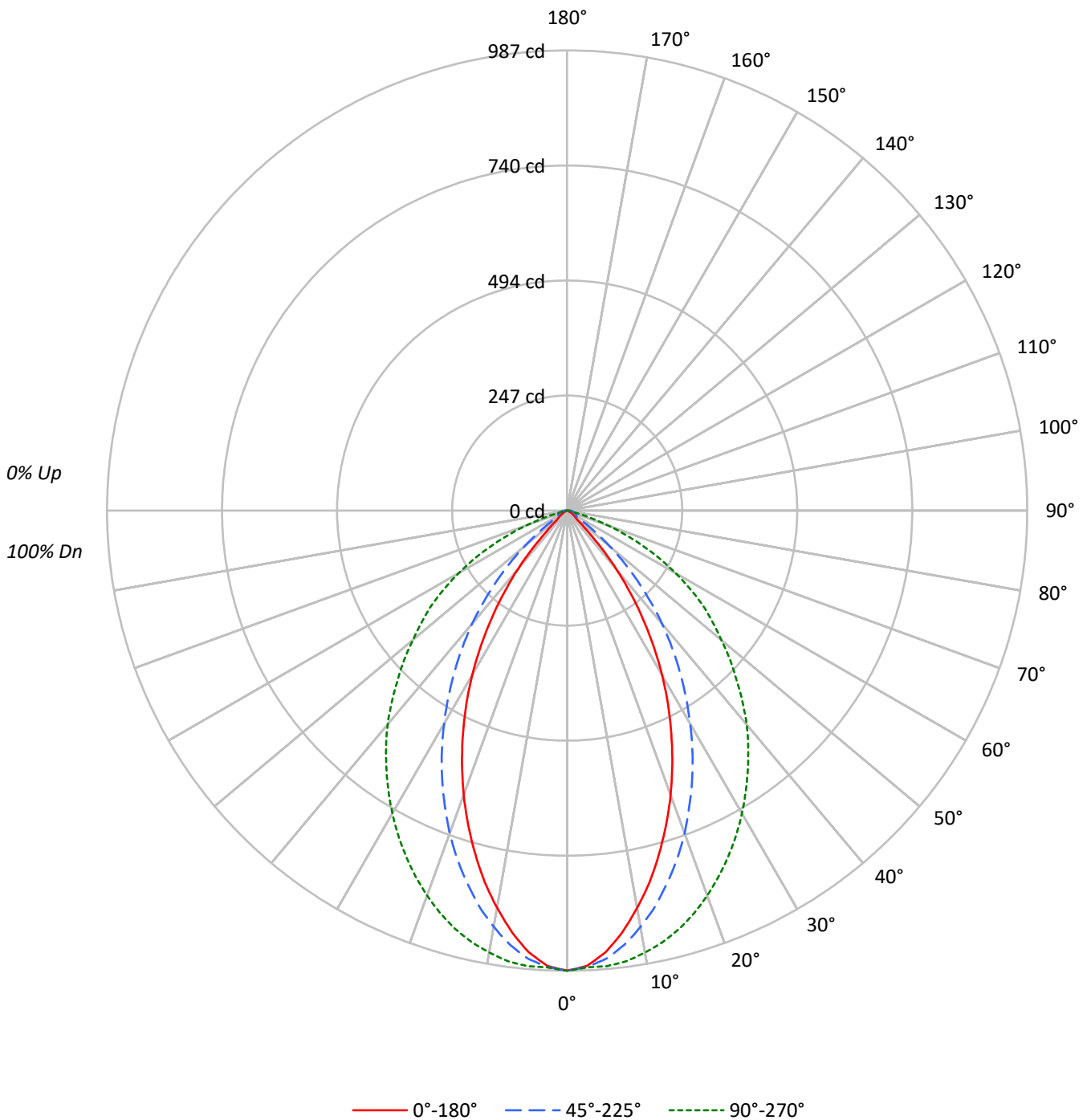
Lumens per Lamp: N/A
Luminaire Lumens: 1269.4 lumens
Efficiency: N/A
Efficacy: 40.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (A_{in}): 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	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																												
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90																												
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81																												
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72																												
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65																												
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59																												
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54																												
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49																												
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45																												
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42																												
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6795	6795	6795
5°	6569	6670	6779
10°	6050	6339	6730
15°	5432	5900	6619
20°	4755	5396	6438
25°	4017	4820	6214
30°	3237	4194	5962
35°	2380	3534	5680
40°	1486	2851	5386
45°	556	2083	5006
50°	260	1301	4622
55°	190	540	4275
60°	134	285	3699
65°	80	337	2931
70°	72	391	1860
75°	96	388	583
80°	143	484	432
85°	284	766	577

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5006 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.5	7.1
10°-20°	234.3	18.5
20°-30°	298.5	23.5
30°-40°	277.8	21.9
40°-50°	190.3	15.0
50°-60°	104.8	8.3
60°-70°	49.6	3.9
70°-80°	15.6	1.2
80°-90°	8.0	0.6
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°	623.2	49.1
0°-40°	901.0	71.0
0°-60°	1196.2	94.2
0°-90°	1269.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1269.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	987	987	987	987	987	
5°	950	963	965	972	981	88
15°	762	786	828	890	929	212
25°	529	562	634	736	818	241
35°	283	323	420	559	676	176
45°	57	96	214	379	514	54
55°	16	18	45	212	356	14
65°	5	6	21	78	180	6
75°	4	6	15	16	22	4
85°	4	8	10	8	7	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	986.9	986.9	986.9	986.9	986.9
2.5°	977.2	986.9	979.6	979.6	980.8
5°	950.5	962.6	965.0	972.3	980.8
7.5°	911.6	927.4	939.5	960.2	974.8
10°	865.4	884.8	906.7	940.7	962.6
12.5°	816.8	837.4	870.2	917.6	948.0
15°	762.1	786.4	827.7	889.7	928.6
17.5°	706.2	732.9	783.9	856.9	905.5
20°	649.0	677.0	736.5	818.0	878.7
22.5°	589.5	619.9	685.5	777.9	849.6
25°	528.7	561.5	634.4	736.5	818.0
27.5°	467.9	502.0	582.2	694.0	785.2
30°	407.2	442.4	527.5	650.2	749.9
32.5°	345.2	384.1	474.0	606.5	713.4
35°	283.2	323.3	420.5	559.1	675.8
37.5°	222.4	263.7	368.3	514.1	638.1
40°	165.3	206.6	317.2	469.1	599.2
42.5°	107.0	150.7	263.7	423.0	556.7
45°	57.1	96.0	213.9	379.2	514.1
47.5°	30.4	51.0	166.5	335.5	474.0
50°	24.3	28.0	121.5	291.7	431.5
52.5°	19.4	21.9	77.8	246.7	393.8
55°	15.8	18.2	45.0	211.5	356.1
57.5°	12.2	14.6	25.5	176.2	312.4
60°	9.7	10.9	20.7	141.0	268.6
62.5°	6.1	8.5	20.7	109.4	224.9
65°	4.9	6.1	20.7	77.8	179.9
67.5°	4.9	4.9	20.7	51.0	134.9
70°	3.6	3.6	19.4	32.8	92.4
72.5°	3.6	3.6	17.0	21.9	53.5
75°	3.6	6.1	14.6	15.8	21.9
77.5°	3.6	9.7	13.4	13.4	12.2
80°	3.6	9.7	12.2	10.9	10.9
82.5°	3.6	9.7	9.7	9.7	8.5
85°	3.6	8.5	9.7	8.5	7.3
87.5°	3.6	8.5	8.5	8.5	4.9
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	15.70	16.99	16.07	17.30	17.62
	3H	0.00	0.00	0.00	0.00	0.00	16.49	17.63	16.87	17.96	18.32
	4H	0.00	0.00	0.00	0.00	0.00	16.52	17.57	16.92	17.92	18.31
	6H	0.00	0.35	0.00	0.72	1.11	16.47	17.44	16.89	17.81	18.21
	8H	0.04	0.96	0.47	1.35	1.76	16.45	17.37	16.88	17.76	18.16
	12H	0.78	1.66	1.22	2.04	2.47	16.43	17.31	16.86	17.69	18.12
4H	2H	0.00	0.55	0.00	0.90	1.29	15.48	16.54	15.89	16.89	17.28
	3H	0.36	1.22	0.77	1.63	2.03	16.31	17.18	16.73	17.58	17.98
	4H	0.95	1.72	1.39	2.14	2.59	16.35	17.12	16.78	17.54	17.98
	6H	2.44	3.10	2.90	3.55	4.02	16.34	17.00	16.80	17.45	17.91
	8H	3.17	3.79	3.64	4.24	4.71	16.32	16.94	16.79	17.39	17.86
	12H	3.91	4.45	4.40	4.94	5.41	16.32	16.87	16.81	17.35	17.82
8H	4H	3.00	3.62	3.47	4.06	4.54	16.23	16.85	16.70	17.30	17.77
	6H	4.74	5.24	5.24	5.74	6.22	16.24	16.74	16.74	17.24	17.72
	8H	5.68	6.13	6.20	6.65	7.14	16.24	16.69	16.76	17.21	17.70
	12H	6.61	7.01	7.13	7.51	8.08	16.29	16.69	16.80	17.18	17.76
12H	4H	3.30	3.85	3.79	4.33	4.80	16.19	16.74	16.68	17.22	17.70
	6H	5.19	5.65	5.72	6.16	6.66	16.19	16.64	16.71	17.16	17.65
	8H	6.32	6.72	6.84	7.22	7.79	16.23	16.63	16.74	17.13	17.70