

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: P1061862

Luminaire Tested: S125RDR-H1090D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061862
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-H1090D840-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

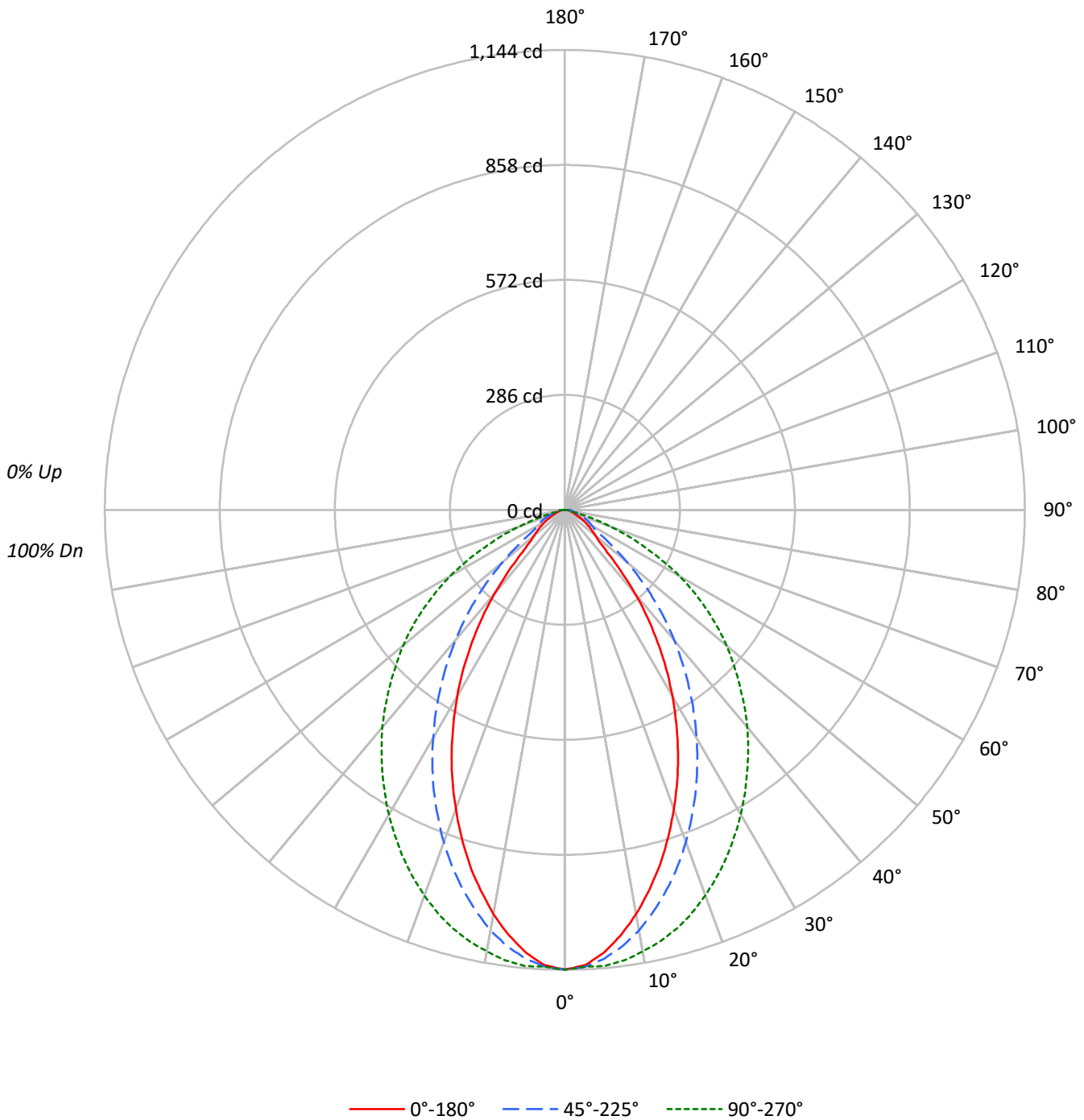
Lumens per Lamp: N/A
Luminaire Lumens: 1656.6 lumens
Efficiency: N/A
Efficacy: 53.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7875	7875	7875
5°	7644	7745	7871
10°	7138	7427	7800
15°	6515	6974	7685
20°	5806	6448	7480
25°	5060	5854	7239
30°	4252	5208	6957
35°	3381	4525	6650
40°	2436	3802	6347
45°	1444	3018	5977
50°	1068	2148	5625
55°	905	1328	5150
60°	737	1071	4536
65°	573	991	3584
70°	489	856	2398
75°	452	745	971
80°	484	769	674
85°	577	1153	766

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5977 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.4	6.4
10°-20°	276.8	16.7
20°-30°	361.9	21.8
30°-40°	352.5	21.3
40°-50°	264.4	16.0
50°-60°	165.8	10.0
60°-70°	86.3	5.2
70°-80°	31.2	1.9
80°-90°	12.4	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°	744.1	44.9
0°-40°	1096.6	66.2
0°-60°	1526.8	92.2
0°-90°	1656.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1656.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1144	1144	1144	1144	1144	
5°	1106	1121	1121	1129	1139	103
15°	914	941	978	1039	1078	255
25°	666	702	771	875	953	304
35°	402	445	538	682	791	250
45°	148	192	310	479	614	125
55°	75	79	111	289	429	67
65°	35	38	61	117	220	36
75°	17	23	28	29	36	19
85°	7	12	15	13	10	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1143.7	1143.7	1143.7	1143.7	1143.7
2.5°	1134.0	1144.9	1137.6	1137.6	1137.6
5°	1106.0	1120.6	1120.6	1129.1	1138.8
7.5°	1067.1	1084.1	1095.1	1115.7	1130.3
10°	1020.9	1041.6	1062.3	1096.3	1115.7
12.5°	968.7	993.0	1022.2	1069.6	1098.7
15°	914.0	940.7	978.4	1039.2	1078.1
17.5°	854.4	886.0	931.0	1003.9	1051.3
20°	792.4	824.0	880.0	962.6	1020.9
22.5°	730.5	764.5	825.3	918.9	988.1
25°	666.0	702.5	770.6	875.1	952.9
27.5°	600.4	638.1	713.4	830.1	914.0
30°	534.8	573.7	655.1	781.5	875.1
32.5°	469.1	510.5	596.8	731.7	833.8
35°	402.3	444.8	538.4	681.8	791.2
37.5°	337.9	380.4	480.1	630.8	748.7
40°	271.0	317.2	423.0	579.8	706.2
42.5°	205.4	252.8	365.8	528.7	660.0
45°	148.3	192.0	309.9	478.9	613.8
47.5°	114.2	138.6	252.8	427.8	568.8
50°	99.7	107.0	200.5	380.4	525.1
52.5°	86.3	91.2	150.7	336.7	477.7
55°	75.4	79.0	110.6	289.3	429.0
57.5°	63.2	68.1	87.5	243.1	379.2
60°	53.5	55.9	77.8	200.5	329.4
62.5°	43.8	46.2	69.3	158.0	273.5
65°	35.2	37.7	60.8	116.7	220.0
67.5°	29.2	30.4	51.0	82.6	168.9
70°	24.3	25.5	42.5	57.1	119.1
72.5°	20.7	24.3	34.0	41.3	75.4
75°	17.0	23.1	28.0	29.2	36.5
77.5°	14.6	21.9	23.1	23.1	20.7
80°	12.2	18.2	19.4	18.2	17.0
82.5°	9.7	14.6	15.8	15.8	13.4
85°	7.3	12.2	14.6	13.4	9.7
87.5°	4.9	10.9	12.2	10.9	7.3
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	7.09	8.44	7.46	8.76	9.07	16.70	18.05	17.07	18.37	18.68
	3H	7.95	9.15	8.33	9.48	9.84	17.54	18.74	17.92	19.07	19.43
	4H	8.37	9.49	8.77	9.84	10.22	17.62	18.74	18.02	19.09	19.47
	6H	8.80	9.83	9.21	10.20	10.59	17.60	18.63	18.01	19.00	19.39
	8H	8.98	9.95	9.41	10.34	10.75	17.59	18.56	18.02	18.95	19.36
	12H	9.14	10.07	9.57	10.46	10.89	17.57	18.51	18.01	18.89	19.32
4H	2H	8.05	9.17	8.46	9.52	9.91	16.56	17.68	16.97	18.03	18.42
	3H	9.10	10.02	9.52	10.42	10.83	17.47	18.39	17.89	18.79	19.20
	4H	9.67	10.49	10.10	10.91	11.35	17.58	18.40	18.01	18.81	19.26
	6H	10.27	10.98	10.73	11.42	11.89	17.60	18.31	18.07	18.76	19.22
	8H	10.51	11.17	10.97	11.61	12.08	17.60	18.27	18.07	18.71	19.18
	12H	10.73	11.32	11.22	11.80	12.27	17.62	18.20	18.10	18.68	19.16
8H	4H	10.14	10.80	10.61	11.25	11.72	17.50	18.16	17.97	18.61	19.08
	6H	10.95	11.49	11.45	11.99	12.47	17.56	18.10	18.06	18.59	19.07
	8H	11.33	11.82	11.85	12.33	12.82	17.59	18.07	18.11	18.59	19.08
	12H	11.72	12.15	12.24	12.65	13.22	17.65	18.08	18.17	18.58	19.15
12H	4H	10.19	10.77	10.68	11.26	11.73	17.47	18.05	17.95	18.53	19.01
	6H	11.07	11.56	11.59	12.07	12.57	17.52	18.01	18.04	18.52	19.01
	8H	11.56	11.99	12.08	12.49	13.06	17.59	18.02	18.11	18.52	19.09