

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: P1061918

Luminaire Tested: S125RDR-H1090D950-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061918
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-H1090D950-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, 90 CRI LEDS
Ballast/Driver: -

Summary

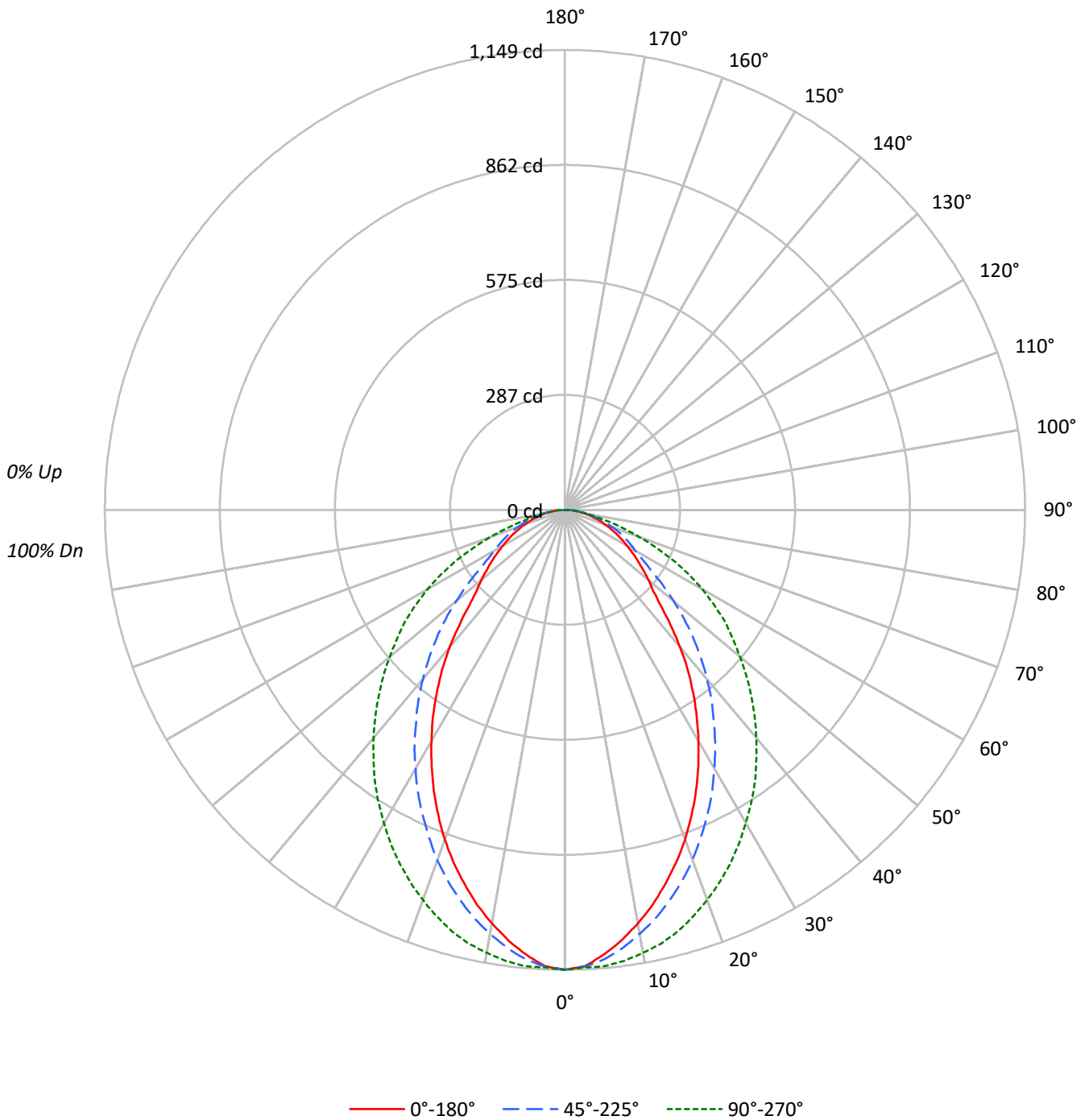
Lumens per Lamp: N/A
Luminaire Lumens: 2153.7 lumens
Efficiency: N/A
Efficacy: 69.0 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86																												
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74																												
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64																												
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56																												
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50																												
6	74	62	54	48	72	61	53	48	59	52	47	58	52	47	56	51	46	44																												
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40																												
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36																												
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33																												
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7910	7910	7910
5°	7711	7790	7909
10°	7334	7519	7856
15°	6896	7199	7772
20°	6425	6828	7602
25°	5885	6391	7412
30°	5301	5931	7182
35°	4688	5451	6955
40°	4023	4962	6684
45°	3285	4414	6403
50°	2914	3787	6110
55°	2673	3141	5856
60°	2465	2782	5453
65°	2300	2673	4861
70°	2148	2541	3974
75°	1985	2381	2932
80°	1868	2228	2137
85°	1722	2172	1817

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6403 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.3	4.9
10°-20°	286.4	13.3
20°-30°	393.6	18.3
30°-40°	417.1	19.4
40°-50°	364.1	16.9
50°-60°	276.6	12.8
60°-70°	185.3	8.6
70°-80°	95.6	4.4
80°-90°	28.6	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°	786.3	36.5
0°-40°	1203.4	55.9
0°-60°	1844.2	85.6
0°-90°	2153.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2153.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1149	1149	1149	1149	1149	
5°	1116	1127	1127	1135	1144	104
15°	968	986	1010	1055	1090	271
25°	775	799	841	911	976	355
35°	558	590	648	740	828	348
45°	337	371	453	561	658	266
55°	223	230	262	384	488	200
65°	141	145	164	219	298	140
75°	75	79	90	95	110	80
85°	22	28	28	25	23	25
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1148.9	1148.9	1148.9	1148.9	1148.9
2.5°	1140.8	1148.9	1142.0	1142.0	1144.3
5°	1115.6	1127.1	1127.1	1135.1	1144.3
7.5°	1084.6	1097.2	1104.1	1122.5	1136.2
10°	1049.0	1062.8	1075.4	1103.0	1123.6
12.5°	1011.1	1026.1	1045.6	1081.1	1109.8
15°	967.5	985.9	1010.0	1054.7	1090.3
17.5°	923.9	942.3	972.1	1024.9	1065.1
20°	876.9	896.4	931.9	989.3	1037.5
22.5°	826.4	848.2	886.0	951.5	1007.7
25°	774.7	798.8	841.3	911.3	975.6
27.5°	720.8	749.5	795.4	870.0	941.1
30°	666.8	695.5	746.0	827.5	903.3
32.5°	612.9	643.9	699.0	785.0	866.5
35°	557.8	589.9	648.5	740.3	827.5
37.5°	503.8	536.0	601.4	696.7	785.0
40°	447.6	480.9	552.1	651.9	743.7
42.5°	390.2	425.8	502.7	606.0	701.3
45°	337.4	370.7	453.3	561.2	657.6
47.5°	298.4	320.2	404.0	515.3	615.2
50°	272.0	283.5	353.5	470.6	570.4
52.5°	245.6	254.8	306.4	424.7	527.9
55°	222.7	229.5	261.7	384.5	487.8
57.5°	199.7	206.6	227.2	344.3	440.7
60°	179.0	184.8	202.0	301.8	396.0
62.5°	159.5	164.1	182.5	261.7	347.8
65°	141.2	144.6	164.1	219.2	298.4
67.5°	122.8	126.2	145.8	179.0	245.6
70°	106.7	107.9	126.2	145.8	197.4
72.5°	90.7	91.8	106.7	118.2	151.5
75°	74.6	79.2	89.5	95.3	110.2
77.5°	60.8	66.6	72.3	74.6	74.6
80°	47.1	53.9	56.2	56.2	53.9
82.5°	34.4	40.2	41.3	39.0	36.7
85°	21.8	27.5	27.5	25.2	23.0
87.5°	10.3	14.9	14.9	13.8	10.3
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	13.79	15.29	14.16	15.60	15.92	17.72	19.22	18.08	19.53	19.84
	3H	15.36	16.71	15.74	17.03	17.40	19.14	20.48	19.52	20.81	21.17
	4H	15.98	17.24	16.38	17.58	17.96	19.56	20.82	19.96	21.16	21.54
	6H	16.47	17.63	16.88	18.00	18.39	19.77	20.94	20.19	21.30	21.70
	8H	16.65	17.75	17.07	18.14	18.54	19.83	20.94	20.26	21.33	21.73
	12H	16.77	17.83	17.20	18.21	18.64	19.87	20.93	20.30	21.31	21.74
4H	2H	14.53	15.79	14.93	16.14	16.52	17.85	19.10	18.25	19.45	19.83
	3H	16.31	17.35	16.72	17.75	18.15	19.46	20.50	19.87	20.90	21.30
	4H	17.04	17.98	17.48	18.40	18.84	19.98	20.92	20.42	21.34	21.78
	6H	17.68	18.50	18.14	18.94	19.40	20.33	21.14	20.78	21.59	22.05
	8H	17.91	18.67	18.37	19.12	19.58	20.42	21.19	20.89	21.63	22.10
	12H	18.08	18.76	18.56	19.24	19.71	20.50	21.18	20.98	21.66	22.13
8H	4H	17.44	18.21	17.91	18.65	19.12	20.09	20.85	20.55	21.30	21.77
	6H	18.23	18.86	18.73	19.35	19.83	20.53	21.16	21.03	21.65	22.13
	8H	18.55	19.12	19.07	19.63	20.12	20.69	21.25	21.20	21.76	22.25
	12H	18.83	19.33	19.34	19.82	20.39	20.82	21.32	21.33	21.81	22.38
12H	4H	17.49	18.17	17.97	18.65	19.12	20.09	20.77	20.57	21.25	21.72
	6H	18.31	18.88	18.83	19.39	19.88	20.54	21.11	21.06	21.62	22.11
	8H	18.71	19.21	19.22	19.70	20.27	20.75	21.25	21.26	21.75	22.31