

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: P1175399

Luminaire Tested: S125RDRP-H1090D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175399
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)
Test Lab: INNOVATION CENTER
Issue Date: 8/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-H1090D940-X4F0-XX-UDD-WVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

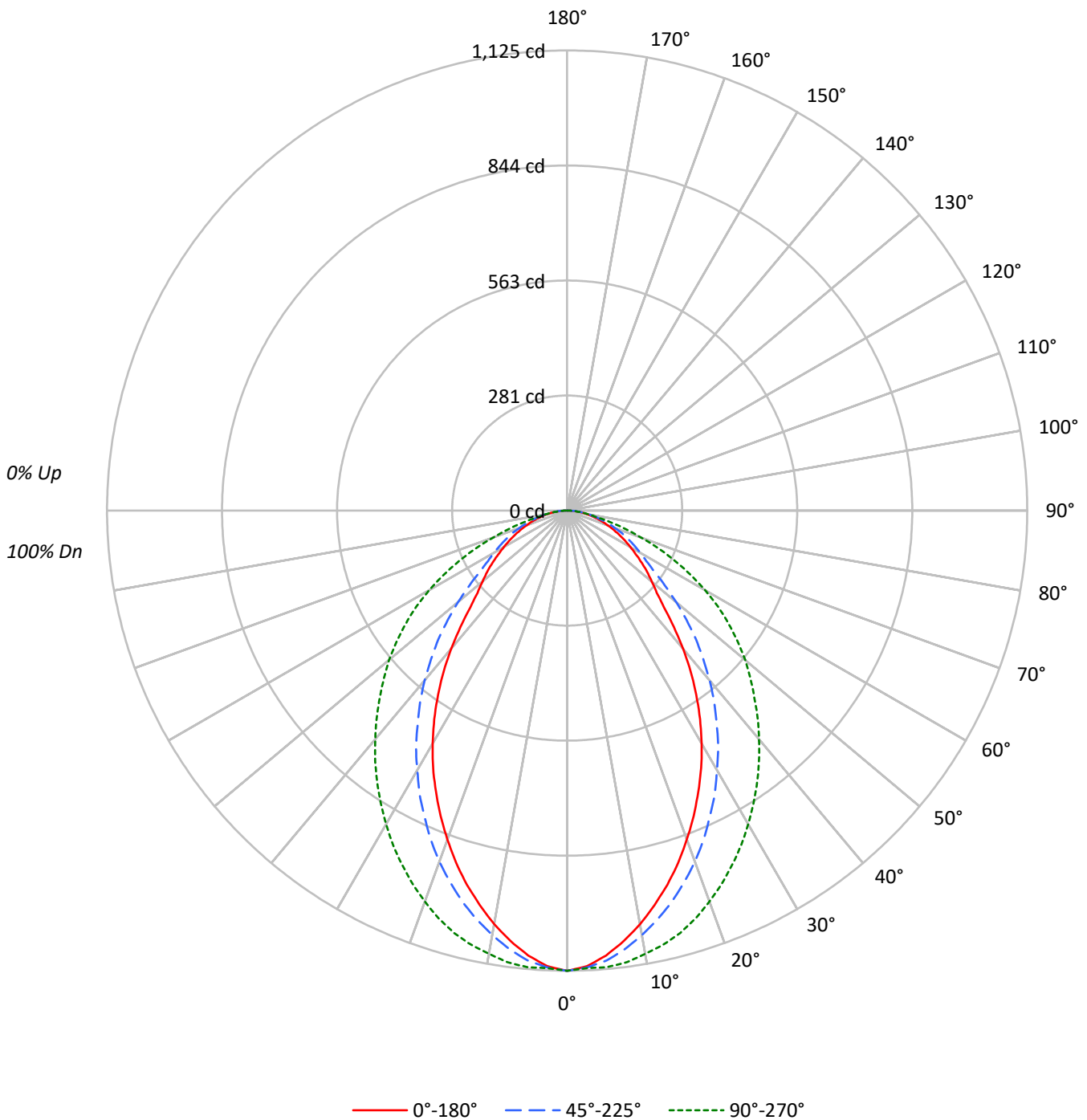
Lumens per Lamp: N/A
Luminaire Lumens: 2119.8 lumens
Efficiency: N/A
Efficacy: 67.9 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (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	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				
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	73	69	77	72	68	74	70	66					64				
4	86	75	67	61	84	74	66	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	47	59	52	47	58	51	47	56	51	46					44				
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42					40				
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38					36				
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35					33				
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32					30				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7747	7747	7747
5°	7546	7632	7744
10°	7179	7366	7693
15°	6747	7054	7619
20°	6271	6690	7454
25°	5762	6270	7257
30°	5225	5824	7039
35°	4625	5355	6808
40°	3966	4868	6559
45°	3255	4334	6306
50°	2895	3724	6087
55°	2672	3119	5779
60°	2459	2841	5354
65°	2287	2677	4731
70°	2134	2500	3865
75°	2008	2312	2897
80°	1895	2121	2082
85°	1738	2109	1738

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6306 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.2	4.9
10°-20°	280.8	13.2
20°-30°	386.3	18.2
30°-40°	409.7	19.3
40°-50°	358.6	16.9
50°-60°	275.1	13.0
60°-70°	183.3	8.6
70°-80°	94.0	4.4
80°-90°	27.9	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°	771.2	36.4
0°-40°	1180.9	55.7
0°-60°	1814.6	85.6
0°-90°	2119.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2119.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1125	1125	1125	1125	1125	
5°	1092	1106	1104	1112	1120	102
15°	947	968	990	1036	1069	265
25°	758	784	825	895	955	348
35°	550	576	637	731	810	343
45°	334	362	445	556	648	264
55°	223	227	260	386	481	200
65°	140	141	164	216	290	140
75°	76	80	87	92	109	80
85°	22	25	27	26	22	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1125.2	1125.2	1125.2	1125.2	1125.2
2.5°	1114.7	1126.1	1117.6	1118.5	1119.5
5°	1091.8	1106.1	1104.2	1111.8	1120.4
7.5°	1061.2	1076.5	1081.3	1100.4	1113.7
10°	1026.8	1044.0	1053.6	1082.2	1100.4
12.5°	987.6	1007.7	1023.0	1060.2	1087.0
15°	946.6	968.5	989.6	1036.4	1068.8
17.5°	902.6	924.6	952.3	1005.8	1045.0
20°	855.8	879.7	913.1	970.5	1017.3
22.5°	808.1	832.9	871.1	934.2	987.6
25°	758.4	784.2	825.3	895.0	955.2
27.5°	709.7	733.6	781.3	855.8	921.7
30°	657.2	682.0	732.6	814.8	885.4
32.5°	604.6	629.5	687.7	773.7	848.2
35°	550.2	576.0	637.1	730.7	810.0
37.5°	495.7	522.5	590.3	686.8	770.8
40°	441.3	469.9	541.6	642.8	729.8
42.5°	385.9	416.5	491.9	599.8	689.6
45°	334.3	362.0	445.1	555.9	647.6
47.5°	297.1	313.3	395.4	511.0	607.5
50°	270.3	278.0	347.7	468.0	568.3
52.5°	246.4	251.2	300.9	427.9	525.3
55°	222.6	227.3	259.8	385.9	481.4
57.5°	199.6	202.5	229.2	343.9	437.5
60°	178.6	180.5	206.3	301.8	388.8
62.5°	159.5	160.5	184.3	258.9	340.0
65°	140.4	141.4	164.3	215.9	290.4
67.5°	123.2	123.2	145.2	176.7	242.6
70°	106.0	106.0	124.2	143.3	192.0
72.5°	90.7	92.7	105.1	115.6	150.0
75°	75.5	80.2	86.9	91.7	108.9
77.5°	61.1	66.9	69.7	71.6	72.6
80°	47.8	51.6	53.5	54.4	52.5
82.5°	35.3	38.2	39.2	39.2	36.3
85°	22.0	24.8	26.7	25.8	22.0
87.5°	10.5	14.3	15.3	13.4	10.5
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	13.73	15.23	14.09	15.54	15.86	17.75	19.25	18.12	19.57	19.88
	3H	15.31	16.66	15.69	16.99	17.35	19.14	20.49	19.52	20.81	21.18
	4H	15.96	17.22	16.36	17.57	17.95	19.55	20.81	19.95	21.16	21.54
	6H	16.47	17.63	16.88	18.00	18.39	19.75	20.92	20.17	21.28	21.68
	8H	16.65	17.76	17.08	18.15	18.55	19.81	20.92	20.24	21.31	21.71
	12H	16.77	17.84	17.20	18.22	18.65	19.84	20.90	20.27	21.29	21.72
4H	2H	14.50	15.76	14.90	16.11	16.49	17.88	19.14	18.28	19.49	19.87
	3H	16.28	17.33	16.69	17.73	18.13	19.45	20.50	19.86	20.90	21.30
	4H	17.05	17.99	17.48	18.41	18.84	19.96	20.90	20.40	21.32	21.76
	6H	17.69	18.51	18.15	18.95	19.41	20.29	21.11	20.75	21.55	22.01
	8H	17.92	18.68	18.38	19.13	19.59	20.39	21.15	20.85	21.60	22.07
	12H	18.09	18.77	18.57	19.25	19.72	20.46	21.14	20.94	21.62	22.09
8H	4H	17.43	18.20	17.90	18.64	19.11	20.06	20.83	20.53	21.27	21.74
	6H	18.21	18.84	18.71	19.33	19.81	20.48	21.11	20.98	21.61	22.08
	8H	18.53	19.09	19.04	19.60	20.09	20.64	21.21	21.16	21.72	22.21
	12H	18.79	19.29	19.30	19.78	20.35	20.78	21.28	21.29	21.77	22.34
12H	4H	17.47	18.15	17.95	18.63	19.10	20.06	20.75	20.54	21.22	21.70
	6H	18.28	18.85	18.80	19.36	19.85	20.49	21.06	21.01	21.57	22.06
	8H	18.67	19.17	19.18	19.66	20.23	20.70	21.21	21.21	21.70	22.26