

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: P1175399

Luminaire Tested: S125RDR-H1090D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2019
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: S125RDR-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

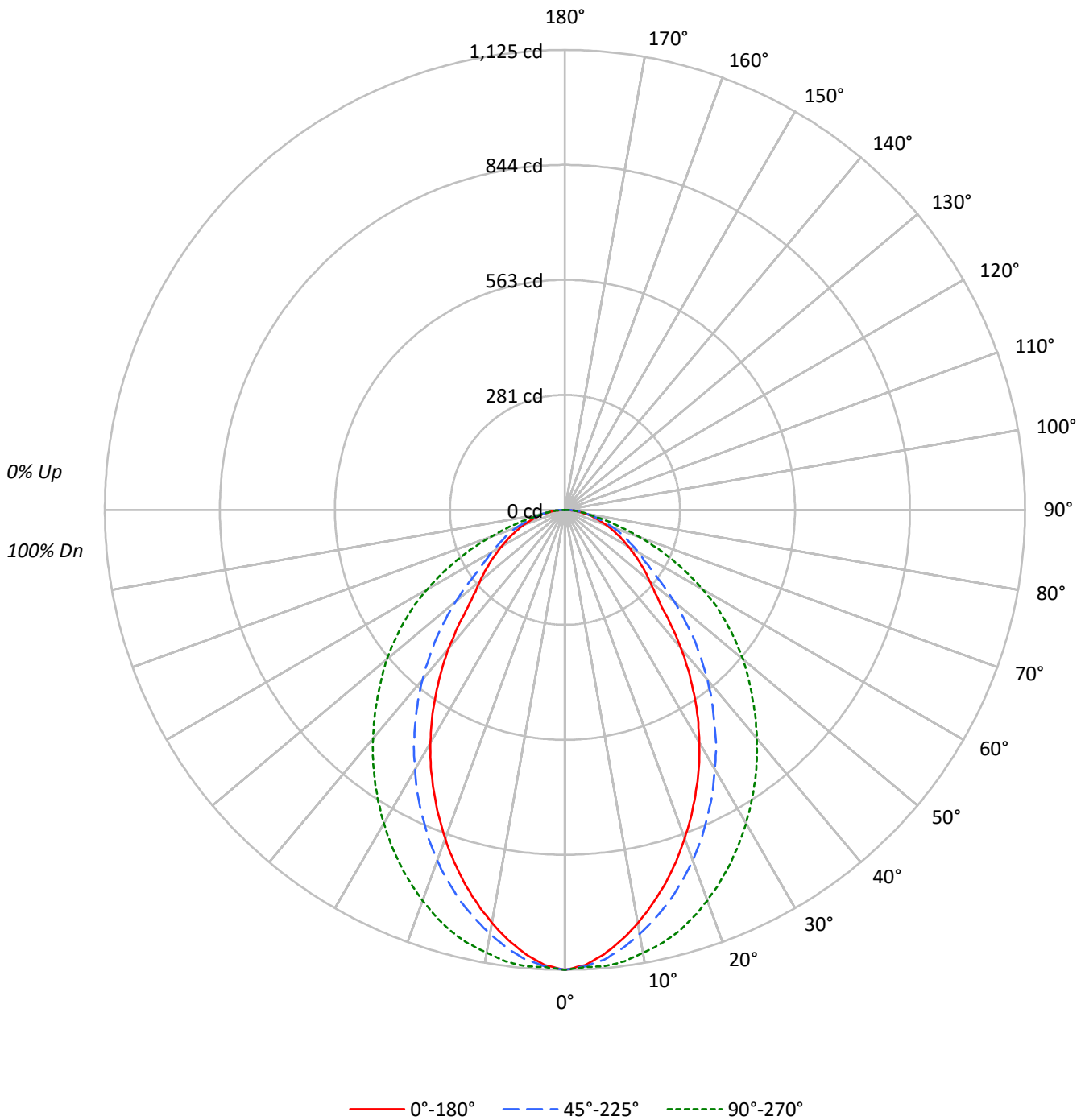
Lumens per Lamp: N/A
Luminaire Lumens: 2119.8 lumens
Efficiency: N/A
Efficacy: 67.9 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86				86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74				74
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64				64
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56				56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44				44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36				36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33				33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30				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

(END OF REPORT)