

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: P1175385

Luminaire Tested: S125RDR-S850D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2019
Report Number: P1175385
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-S850D840-X4F0-XX-UDD-WVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

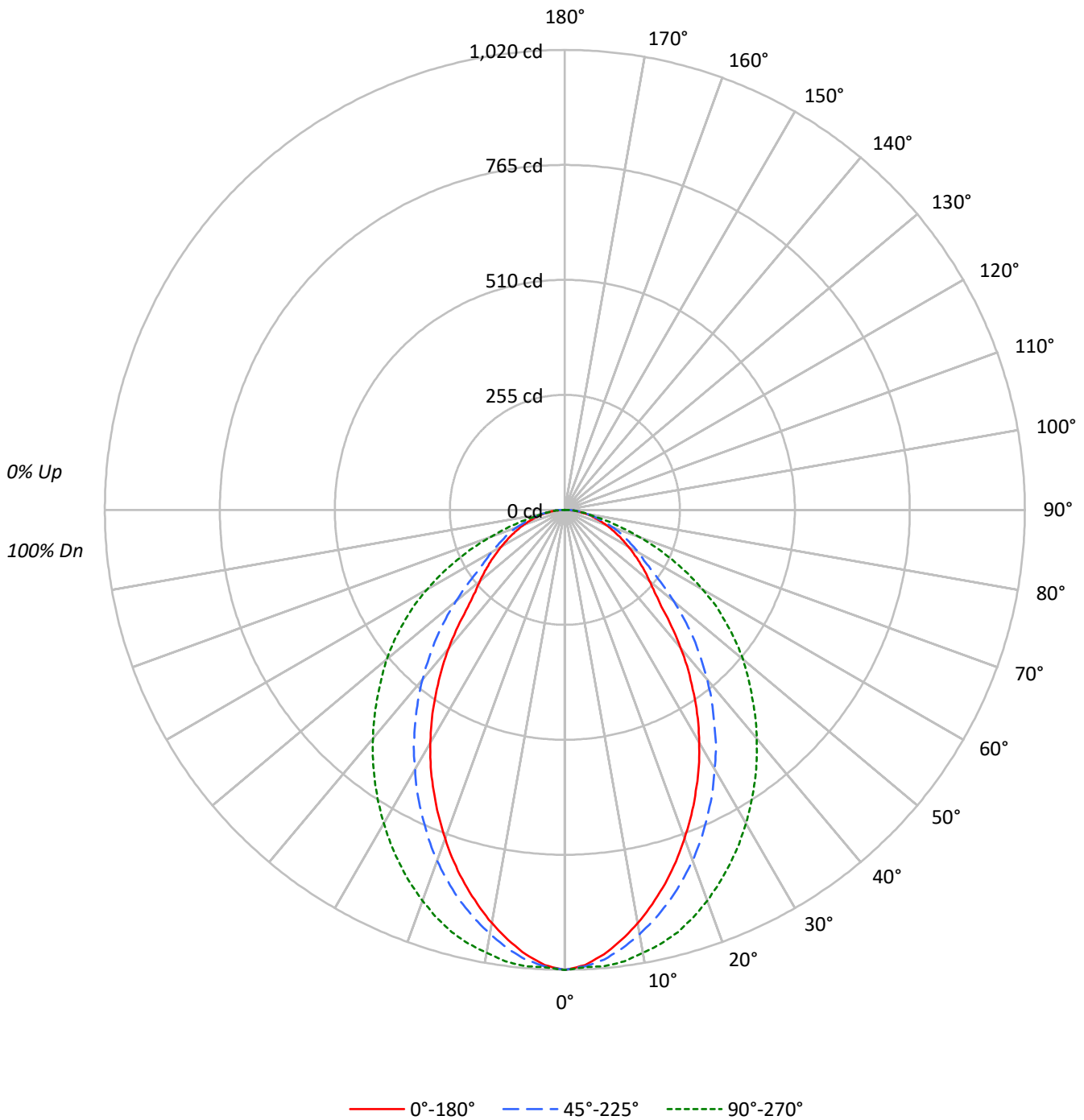
Lumens per Lamp: N/A
Luminaire Lumens: 1922.3 lumens
Efficiency: N/A
Efficacy: 74.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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°	7026	7026	7026
5°	6843	6921	7022
10°	6510	6680	6976
15°	6119	6397	6909
20°	5687	6068	6759
25°	5225	5686	6581
30°	4738	5282	6384
35°	4193	4856	6174
40°	3597	4414	5948
45°	2952	3930	5719
50°	2625	3377	5521
55°	2422	2828	5241
60°	2231	2576	4854
65°	2074	2427	4290
70°	1935	2267	3505
75°	1820	2096	2626
80°	1717	1923	1887
85°	1572	1920	1572

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5719 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.5	4.9
10°-20°	254.6	13.2
20°-30°	350.3	18.2
30°-40°	371.5	19.3
40°-50°	325.2	16.9
50°-60°	249.5	13.0
60°-70°	166.2	8.6
70°-80°	85.2	4.4
80°-90°	25.3	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°	699.4	36.4
0°-40°	1070.9	55.7
0°-60°	1645.6	85.6
0°-90°	1922.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1922.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1020	1020	1020	1020	1020	
5°	990	1003	1001	1008	1016	93
15°	858	878	897	940	969	241
25°	688	711	748	812	866	316
35°	499	522	578	663	734	311
45°	303	328	404	504	587	239
55°	202	206	236	350	437	181
65°	127	128	149	196	263	127
75°	68	73	79	83	99	73
85°	20	22	24	23	20	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1020.4	1020.4	1020.4	1020.4	1020.4
2.5°	1010.8	1021.2	1013.4	1014.3	1015.2
5°	990.1	1003.0	1001.3	1008.2	1016.0
7.5°	962.3	976.2	980.5	997.8	1010.0
10°	931.2	946.7	955.4	981.4	997.8
12.5°	895.6	913.8	927.7	961.5	985.7
15°	858.4	878.3	897.4	939.8	969.3
17.5°	818.5	838.5	863.6	912.1	947.6
20°	776.1	797.8	828.1	880.0	922.5
22.5°	732.8	755.3	790.0	847.1	895.6
25°	687.8	711.1	748.4	811.6	866.2
27.5°	643.6	665.2	708.5	776.1	835.9
30°	595.9	618.5	664.4	738.9	803.0
32.5°	548.3	570.8	623.7	701.6	769.2
35°	498.9	522.3	577.7	662.6	734.5
37.5°	449.6	473.8	535.3	622.8	699.0
40°	400.2	426.2	491.1	582.9	661.8
42.5°	349.9	377.7	446.1	544.0	625.4
45°	303.2	328.3	403.6	504.1	587.3
47.5°	269.4	284.1	358.6	463.4	550.9
50°	245.1	252.1	315.3	424.4	515.4
52.5°	223.5	227.8	272.8	388.1	476.4
55°	201.8	206.2	235.6	349.9	436.6
57.5°	181.0	183.6	207.9	311.8	396.7
60°	162.0	163.7	187.1	273.7	352.5
62.5°	144.7	145.5	167.2	234.7	308.4
65°	127.3	128.2	149.0	195.8	263.3
67.5°	111.7	111.7	131.7	160.2	220.0
70°	96.1	96.1	112.6	129.9	174.1
72.5°	82.3	84.0	95.3	104.8	136.0
75°	68.4	72.8	78.8	83.2	98.7
77.5°	55.4	60.6	63.2	65.0	65.8
80°	43.3	46.8	48.5	49.4	47.6
82.5°	32.0	34.6	35.5	35.5	32.9
85°	19.9	22.5	24.3	23.4	19.9
87.5°	9.5	13.0	13.9	12.1	9.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)