

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: P1175391

Luminaire Tested: S125RDR-S850D950-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2019
Report Number: P1175391
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-S850D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

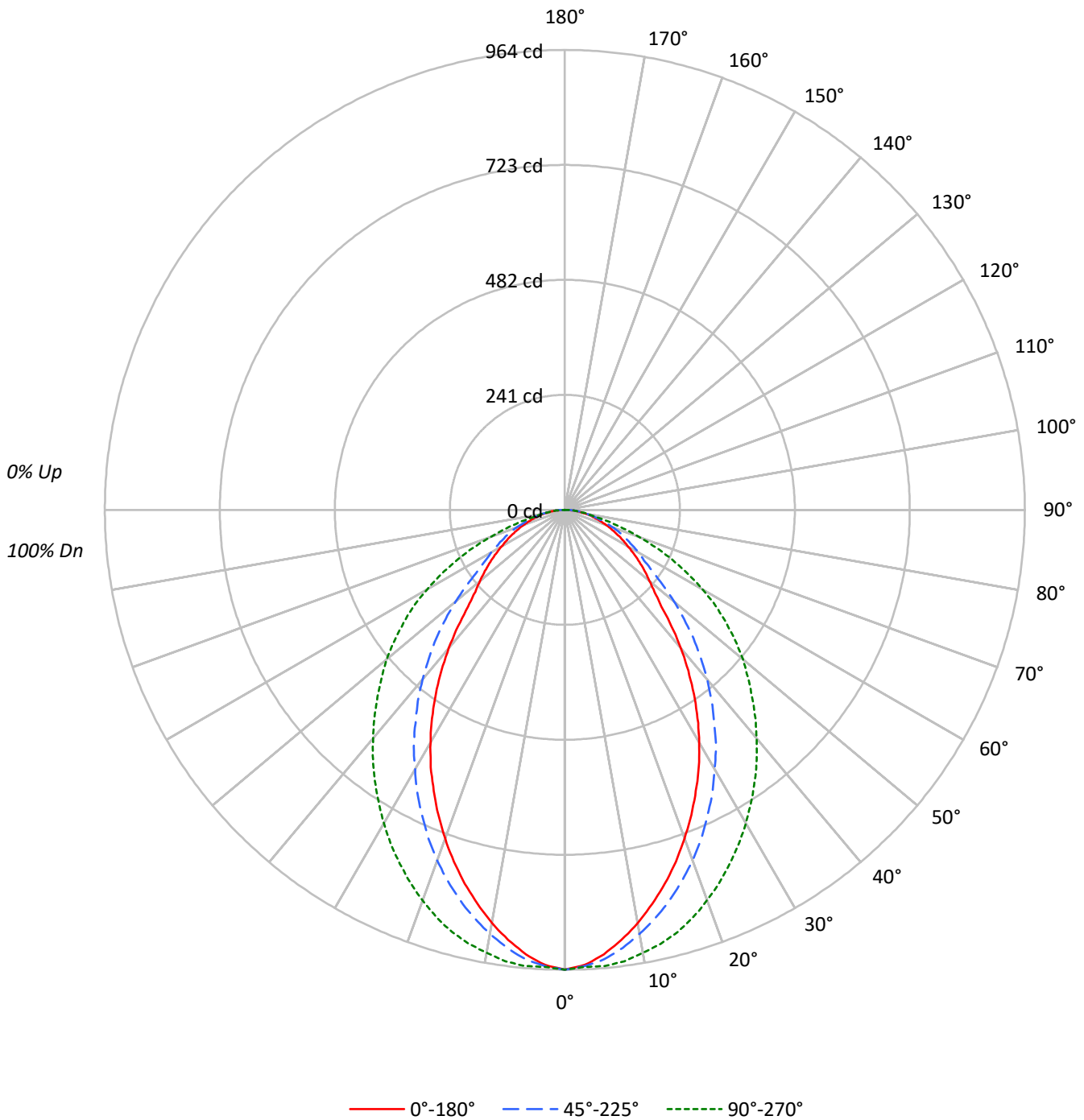
Lumens per Lamp: N/A
Luminaire Lumens: 1816.0 lumens
Efficiency: N/A
Efficacy: 70.4 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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				
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°	6637	6637	6637
5°	6464	6538	6634
10°	6150	6310	6590
15°	5780	6043	6527
20°	5372	5732	6386
25°	4936	5371	6217
30°	4476	4990	6030
35°	3961	4588	5832
40°	3397	4170	5619
45°	2789	3713	5402
50°	2481	3191	5215
55°	2289	2672	4950
60°	2107	2433	4586
65°	1960	2292	4053
70°	1828	2142	3312
75°	1719	1982	2482
80°	1622	1816	1784
85°	1485	1809	1485

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5402 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.2	4.9
10°-20°	240.5	13.2
20°-30°	330.9	18.2
30°-40°	351.0	19.3
40°-50°	307.2	16.9
50°-60°	235.7	13.0
60°-70°	157.0	8.6
70°-80°	80.5	4.4
80°-90°	23.9	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°	660.7	36.4
0°-40°	1011.7	55.7
0°-60°	1554.6	85.6
0°-90°	1816.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1816.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	964	964	964	964	964	
5°	935	948	946	952	960	88
15°	811	830	848	888	916	227
25°	650	672	707	767	818	298
35°	471	493	546	626	694	294
45°	286	310	381	476	555	226
55°	191	195	223	331	412	171
65°	120	121	141	185	249	120
75°	65	69	74	79	93	69
85°	19	21	23	22	19	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	963.9	963.9	963.9	963.9	963.9
2.5°	954.9	964.7	957.4	958.2	959.0
5°	935.3	947.6	945.9	952.5	959.8
7.5°	909.1	922.2	926.3	942.6	954.1
10°	879.6	894.4	902.6	927.1	942.6
12.5°	846.1	863.3	876.4	908.3	931.2
15°	810.9	829.7	847.7	887.8	915.6
17.5°	773.3	792.1	815.8	861.6	895.2
20°	733.2	753.6	782.3	831.4	871.5
22.5°	692.3	713.5	746.3	800.3	846.1
25°	649.7	671.8	707.0	766.7	818.3
27.5°	608.0	628.4	669.3	733.2	789.6
30°	563.0	584.2	627.6	698.0	758.5
32.5°	518.0	539.2	589.2	662.8	726.6
35°	471.3	493.4	545.8	626.0	693.9
37.5°	424.7	447.6	505.7	588.3	660.3
40°	378.0	402.6	464.0	550.7	625.2
42.5°	330.6	356.8	421.4	513.9	590.8
45°	286.4	310.1	381.3	476.2	554.8
47.5°	254.5	268.4	338.8	437.8	520.4
50°	231.6	238.1	297.9	401.0	486.9
52.5°	211.1	215.2	257.8	366.6	450.0
55°	190.7	194.7	222.6	330.6	412.4
57.5°	171.0	173.5	196.4	294.6	374.8
60°	153.0	154.7	176.7	258.6	333.0
62.5°	136.7	137.5	157.9	221.8	291.3
65°	120.3	121.1	140.7	184.9	248.8
67.5°	105.6	105.6	124.4	151.4	207.8
70°	90.8	90.8	106.4	122.7	164.5
72.5°	77.7	79.4	90.0	99.0	128.5
75°	64.6	68.7	74.5	78.6	93.3
77.5°	52.4	57.3	59.7	61.4	62.2
80°	40.9	44.2	45.8	46.6	45.0
82.5°	30.3	32.7	33.5	33.5	31.1
85°	18.8	21.3	22.9	22.1	18.8
87.5°	9.0	12.3	13.1	11.5	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)