

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: P1175383

Luminaire Tested: S125RDR-S850D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2019
Report Number: P1175383
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-S850D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

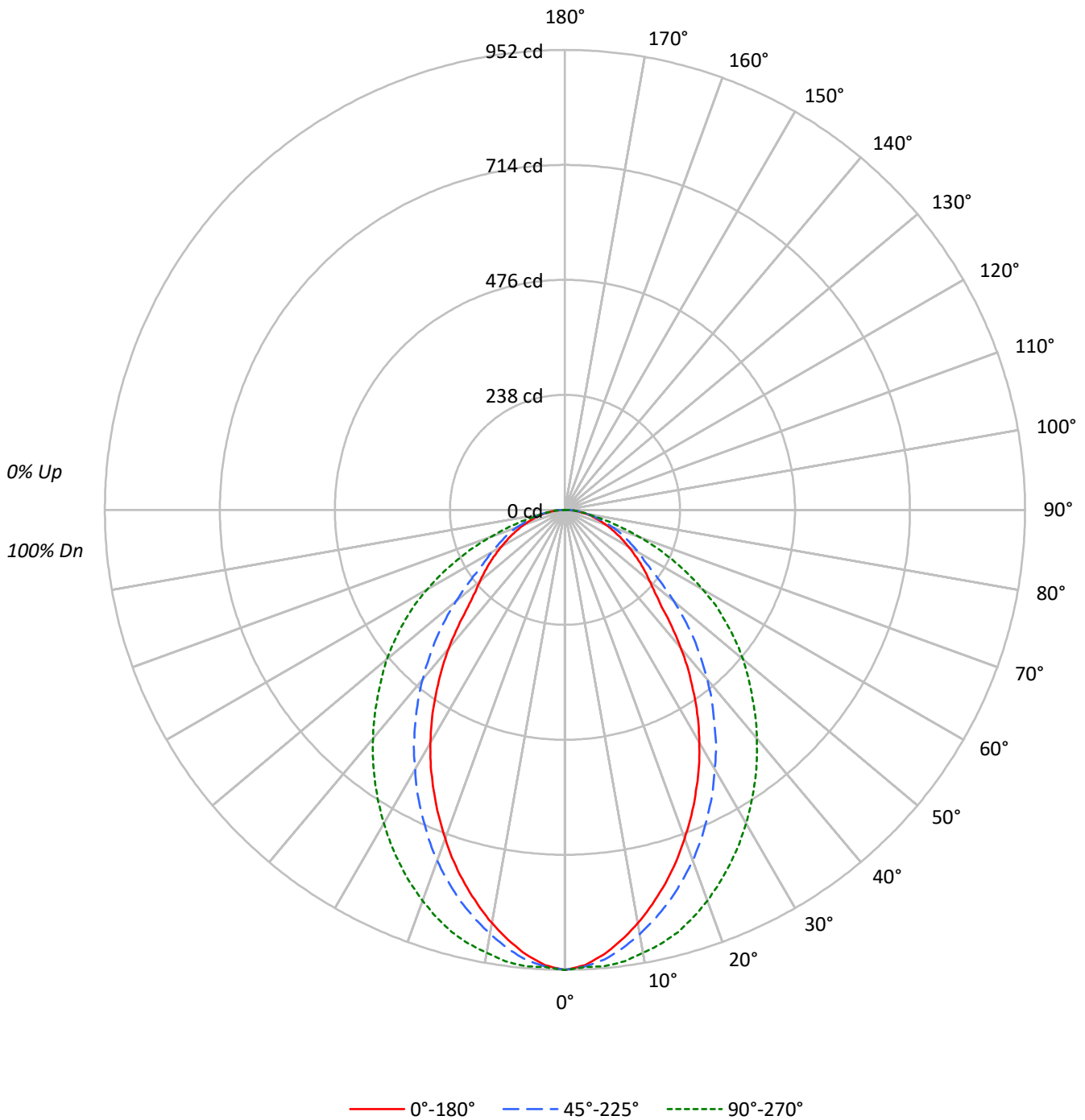
Lumens per Lamp: N/A
Luminaire Lumens: 1794.1 lumens
Efficiency: N/A
Efficacy: 69.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	
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°	6557	6557	6557
5°	6387	6460	6554
10°	6076	6234	6511
15°	5711	5970	6448
20°	5308	5663	6309
25°	4877	5307	6141
30°	4422	4930	5958
35°	3914	4532	5763
40°	3357	4120	5552
45°	2756	3668	5337
50°	2451	3152	5152
55°	2262	2640	4892
60°	2082	2404	4530
65°	1935	2266	4005
70°	1806	2116	3271
75°	1700	1958	2453
80°	1602	1796	1764
85°	1469	1785	1469

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5337 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.2	4.9
10°-20°	237.6	13.2
20°-30°	326.9	18.2
30°-40°	346.8	19.3
40°-50°	303.5	16.9
50°-60°	232.9	13.0
60°-70°	155.1	8.6
70°-80°	79.5	4.4
80°-90°	23.6	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°	652.7	36.4
0°-40°	999.5	55.7
0°-60°	1535.9	85.6
0°-90°	1794.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1794.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	952	952	952	952	952	
5°	924	936	935	941	948	86
15°	801	820	838	877	905	225
25°	642	664	698	758	808	295
35°	466	488	539	618	686	290
45°	283	306	377	470	548	223
55°	188	192	220	327	408	169
65°	119	120	139	183	246	118
75°	64	68	74	78	92	68
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°	952.3	952.3	952.3	952.3	952.3
2.5°	943.5	953.2	945.9	946.7	947.5
5°	924.1	936.2	934.6	941.0	948.3
7.5°	898.2	911.1	915.2	931.3	942.6
10°	869.1	883.6	891.7	916.0	931.3
12.5°	835.9	852.9	865.8	897.4	920.0
15°	801.2	819.8	837.5	877.2	904.6
17.5°	764.0	782.6	806.0	851.3	884.4
20°	724.4	744.6	772.9	821.4	861.0
22.5°	683.9	705.0	737.3	790.7	835.9
25°	641.9	663.7	698.5	757.5	808.4
27.5°	600.7	620.9	661.3	724.4	780.1
30°	556.2	577.2	620.1	689.6	749.4
32.5°	511.7	532.8	582.1	654.8	717.9
35°	465.7	487.5	539.2	618.5	685.6
37.5°	419.6	442.2	499.6	581.3	652.4
40°	373.5	397.8	458.4	544.1	617.7
42.5°	326.6	352.5	416.3	507.7	583.7
45°	283.0	306.4	376.7	470.5	548.1
47.5°	251.4	265.2	334.7	432.5	514.2
50°	228.8	235.3	294.3	396.1	481.0
52.5°	208.6	212.6	254.7	362.2	444.6
55°	188.4	192.4	219.9	326.6	407.5
57.5°	169.0	171.4	194.0	291.0	370.3
60°	151.2	152.8	174.6	255.5	329.0
62.5°	135.0	135.8	156.0	219.1	287.8
65°	118.8	119.6	139.1	182.7	245.8
67.5°	104.3	104.3	122.9	149.6	205.3
70°	89.7	89.7	105.1	121.3	162.5
72.5°	76.8	78.4	88.9	97.8	126.9
75°	63.9	67.9	73.6	77.6	92.2
77.5°	51.7	56.6	59.0	60.6	61.4
80°	40.4	43.7	45.3	46.1	44.5
82.5°	29.9	32.3	33.1	33.1	30.7
85°	18.6	21.0	22.6	21.8	18.6
87.5°	8.9	12.1	12.9	11.3	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)