

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: P1061791

Luminaire Tested: S125RDR-S850D850-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061791
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S850D850-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

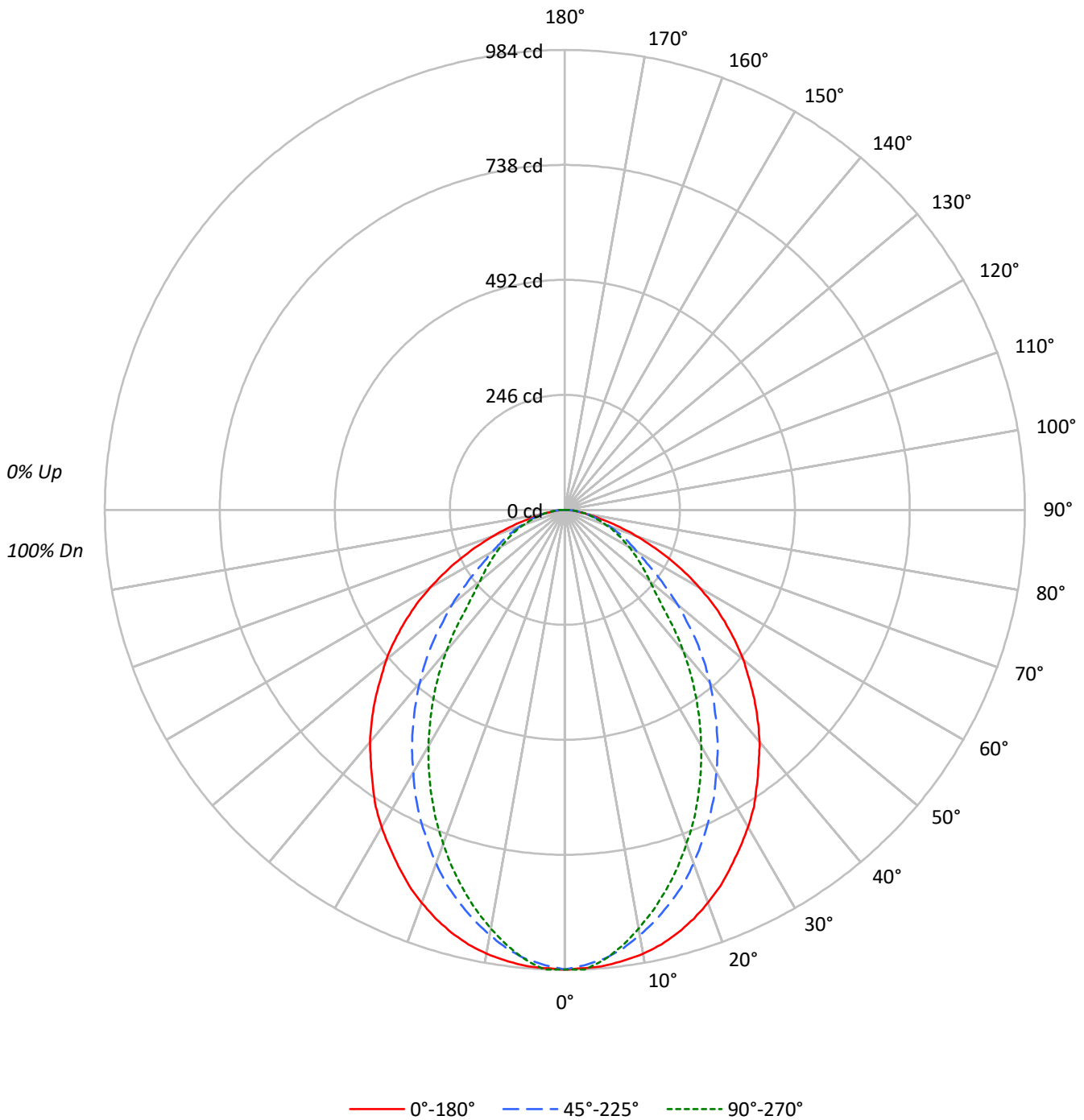
Lumens per Lamp: N/A
Luminaire Lumens: 1863.1 lumens
Efficiency: N/A
Efficacy: 72.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	108	104	100	97	100	97	94	96	93	91	92	90	89	87				87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65				65
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57				57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50				50
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45				45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40				40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36				36
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33				33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30				30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6772	6772	6772
5°	6768	6665	6679
10°	6742	6458	6361
15°	6675	6204	5990
20°	6556	5899	5571
25°	6392	5549	5127
30°	6232	5153	4635
35°	6022	4757	4111
40°	5826	4339	3541
45°	5583	3878	2901
50°	5342	3362	2540
55°	5012	2808	2346
60°	4573	2455	2191
65°	4001	2245	2035
70°	3245	2021	1892
75°	2330	1846	1761
80°	1610	1649	1649
85°	1177	1438	1517

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5583 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.4	4.9
10°-20°	247.3	13.3
20°-30°	341.8	18.3
30°-40°	364.1	19.5
40°-50°	319.9	17.2
50°-60°	242.5	13.0
60°-70°	157.5	8.5
70°-80°	78.0	4.2
80°-90°	20.4	1.1
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°	680.6	36.5
0°-40°	1044.7	56.1
0°-60°	1607.1	86.3
0°-90°	1863.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1863.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	984	984	984	984	984	
5°	979	977	964	968	966	93
15°	936	915	870	850	840	264
25°	841	796	730	693	675	388
35°	716	650	566	515	489	449
45°	573	493	398	327	298	442
55°	418	335	234	202	195	372
65°	246	183	138	127	125	243
75°	88	77	69	67	66	98
85°	15	17	18	18	19	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	983.5	983.5	983.5	983.5	983.5
2.5°	981.3	983.5	974.9	982.4	984.5
5°	979.2	977.1	964.3	967.5	966.4
7.5°	972.8	968.5	947.2	945.0	940.8
10°	964.3	953.6	923.7	916.2	909.8
12.5°	952.5	935.4	899.1	884.2	876.7
15°	936.5	915.1	870.3	850.0	840.4
17.5°	917.3	887.4	840.4	812.6	801.9
20°	894.8	859.6	805.1	773.1	760.3
22.5°	870.3	828.6	767.8	733.6	719.7
25°	841.4	795.5	730.4	693.0	674.9
27.5°	812.6	761.4	690.9	649.2	630.0
30°	783.8	725.1	648.2	603.3	583.0
32.5°	752.8	687.7	608.7	559.5	536.1
35°	716.5	650.3	565.9	514.7	489.1
37.5°	681.3	610.8	524.3	466.6	442.1
40°	648.2	573.4	482.7	419.7	394.0
42.5°	610.8	533.9	441.0	374.8	346.0
45°	573.4	493.3	398.3	326.8	297.9
47.5°	533.9	454.9	353.5	283.0	263.8
50°	498.7	415.4	313.9	249.9	237.1
52.5°	458.1	376.9	273.4	224.2	215.7
55°	417.5	335.3	233.9	201.8	195.4
57.5°	375.9	297.9	202.9	182.6	176.2
60°	332.1	259.5	178.3	162.3	159.1
62.5°	288.3	220.0	157.0	145.2	141.0
65°	245.6	182.6	137.8	127.1	124.9
67.5°	201.8	148.4	118.5	111.1	110.0
70°	161.2	120.7	100.4	96.1	94.0
72.5°	123.9	96.1	84.4	81.2	80.1
75°	87.6	76.9	69.4	67.3	66.2
77.5°	58.7	58.7	55.5	53.4	54.5
80°	40.6	42.7	41.6	41.6	41.6
82.5°	26.7	28.8	29.9	29.9	29.9
85°	14.9	17.1	18.2	18.2	19.2
87.5°	5.3	6.4	7.5	8.5	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)