

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: P1175386

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

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2019
Report Number: P1175386
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-S850D850-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, 80 CRI LEDS
Ballast/Driver: -

Summary

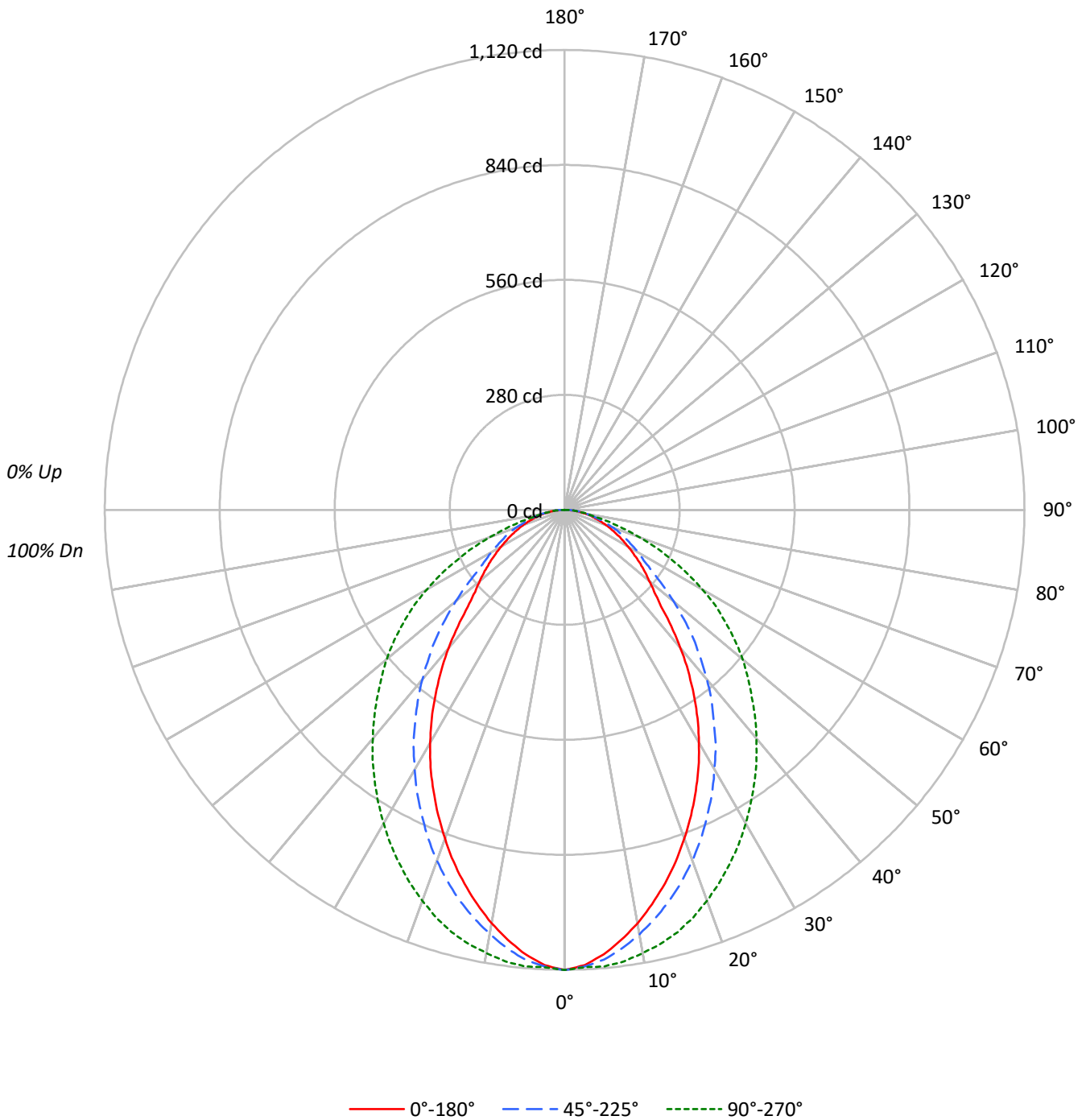
Lumens per Lamp: N/A
Luminaire Lumens: 2111.0 lumens
Efficiency: N/A
Efficacy: 81.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1175386

CATALOG NUMBER: S125RDR-S850D850-X4F0-XX-UDD-WVL-W

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	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°	7715	7715	7715
5°	7514	7600	7712
10°	7149	7335	7661
15°	6720	7025	7587
20°	6245	6663	7422
25°	5738	6244	7226
30°	5203	5801	7011
35°	4605	5333	6780
40°	3950	4847	6532
45°	3242	4317	6280
50°	2884	3708	6063
55°	2660	3105	5755
60°	2450	2830	5331
65°	2278	2665	4712
70°	2126	2490	3849
75°	1998	2304	2884
80°	1887	2113	2074
85°	1730	2101	1730

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6280 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.7	4.9
10°-20°	279.6	13.2
20°-30°	384.7	18.2
30°-40°	408.0	19.3
40°-50°	357.1	16.9
50°-60°	274.0	13.0
60°-70°	182.5	8.6
70°-80°	93.6	4.4
80°-90°	27.8	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°	768.0	36.4
0°-40°	1176.0	55.7
0°-60°	1807.1	85.6
0°-90°	2111.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2111.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1120	1120	1120	1120	1120	
5°	1087	1102	1100	1107	1116	102
15°	943	964	986	1032	1064	264
25°	755	781	822	891	951	347
35°	548	574	634	728	807	341
45°	333	360	443	554	645	263
55°	222	226	259	384	479	199
65°	140	141	164	215	289	139
75°	75	80	87	91	108	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°	1120.5	1120.5	1120.5	1120.5	1120.5
2.5°	1110.1	1121.5	1112.9	1113.9	1114.8
5°	1087.2	1101.5	1099.6	1107.2	1115.8
7.5°	1056.8	1072.0	1076.8	1095.8	1109.1
10°	1022.6	1039.7	1049.2	1077.7	1095.8
12.5°	983.6	1003.5	1018.8	1055.9	1082.5
15°	942.7	964.5	985.5	1032.1	1064.4
17.5°	898.9	920.8	948.4	1001.6	1040.6
20°	852.3	876.1	909.4	966.4	1013.0
22.5°	804.7	829.5	867.5	930.3	983.6
25°	755.3	781.0	821.9	891.3	951.2
27.5°	706.8	730.5	778.1	852.3	917.9
30°	654.4	679.2	729.6	811.4	881.8
32.5°	602.1	626.9	684.9	770.5	844.7
35°	547.9	573.6	634.5	727.7	806.6
37.5°	493.7	520.3	587.9	683.9	767.6
40°	439.5	468.0	539.3	640.2	726.7
42.5°	384.3	414.7	489.9	597.4	686.8
45°	332.9	360.5	443.3	553.6	644.9
47.5°	295.8	312.0	393.8	508.9	605.0
50°	269.2	276.8	346.2	466.1	566.0
52.5°	245.4	250.2	299.6	426.1	523.2
55°	221.6	226.4	258.7	384.3	479.4
57.5°	198.8	201.7	228.3	342.4	435.7
60°	177.9	179.8	205.5	300.6	387.1
62.5°	158.9	159.8	183.6	257.8	338.6
65°	139.8	140.8	163.6	215.0	289.2
67.5°	122.7	122.7	144.6	176.0	241.6
70°	105.6	105.6	123.7	142.7	191.2
72.5°	90.4	92.3	104.6	115.1	149.3
75°	75.1	79.9	86.6	91.3	108.4
77.5°	60.9	66.6	69.4	71.3	72.3
80°	47.6	51.4	53.3	54.2	52.3
82.5°	35.2	38.0	39.0	39.0	36.1
85°	21.9	24.7	26.6	25.7	21.9
87.5°	10.5	14.3	15.2	13.3	10.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)