

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: P1061466

Luminaire Tested: S125RDR-S1090D850-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061466
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S1090D850-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

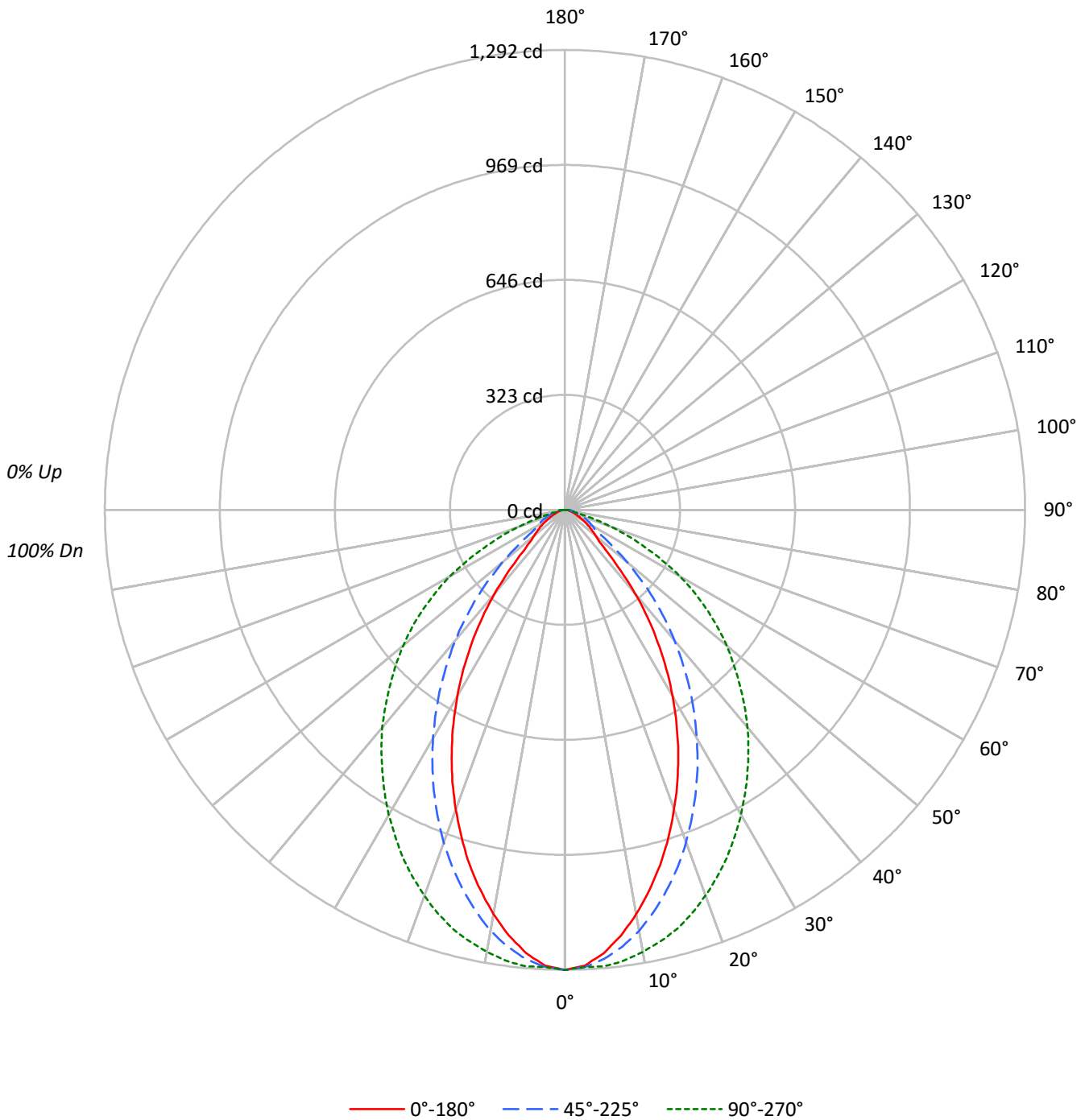
Lumens per Lamp: N/A
Luminaire Lumens: 1872.0 lumens
Efficiency: N/A
Efficacy: 53.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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: P1061466

CATALOG NUMBER: S125RDR-S1090D850-X4F0-XX-UDD-SVL-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	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	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56				56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8898	8898	8898
5°	8638	8752	8894
10°	8066	8393	8815
15°	7362	7881	8683
20°	6561	7286	8453
25°	5718	6615	8180
30°	4804	5886	7862
35°	3821	5114	7515
40°	2753	4296	7172
45°	1632	3410	6754
50°	1206	2427	6355
55°	1023	1501	5820
60°	832	1210	5125
65°	648	1119	4050
70°	554	968	2710
75°	511	841	1096
80°	543	872	761
85°	648	1303	869

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6754 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.1	6.4
10°-20°	312.8	16.7
20°-30°	408.9	21.8
30°-40°	398.3	21.3
40°-50°	298.8	16.0
50°-60°	187.3	10.0
60°-70°	97.5	5.2
70°-80°	35.3	1.9
80°-90°	14.0	0.7
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°	840.9	44.9
0°-40°	1239.2	66.2
0°-60°	1725.3	92.2
0°-90°	1872.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1872.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1292	1292	1292	1292	1292	
5°	1250	1266	1266	1276	1287	116
15°	1033	1063	1106	1174	1218	288
25°	753	794	871	989	1077	344
35°	455	503	608	770	894	282
45°	168	217	350	541	694	141
55°	85	89	125	327	485	76
65°	40	43	69	132	249	41
75°	19	26	32	33	41	21
85°	8	14	16	15	11	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1292.4	1292.4	1292.4	1292.4	1292.4
2.5°	1281.4	1293.8	1285.5	1285.5	1285.5
5°	1249.8	1266.3	1266.3	1275.9	1286.9
7.5°	1205.9	1225.1	1237.5	1260.8	1277.3
10°	1153.7	1177.0	1200.4	1238.8	1260.8
12.5°	1094.6	1122.1	1155.1	1208.6	1241.6
15°	1032.8	1063.0	1105.6	1174.3	1218.2
17.5°	965.5	1001.2	1052.1	1134.5	1188.0
20°	895.5	931.2	994.4	1087.8	1153.7
22.5°	825.4	863.9	932.6	1038.3	1116.6
25°	752.6	793.8	870.8	988.9	1076.8
27.5°	678.5	721.1	806.2	938.1	1032.8
30°	604.3	648.3	740.3	883.1	988.9
32.5°	530.1	576.8	674.4	826.8	942.2
35°	454.6	502.7	608.4	770.5	894.1
37.5°	381.8	429.9	542.5	712.8	846.0
40°	306.3	358.5	478.0	655.1	798.0
42.5°	232.1	285.7	413.4	597.4	745.8
45°	167.6	217.0	350.2	541.1	693.6
47.5°	129.1	156.6	285.7	483.4	642.8
50°	112.6	120.9	226.6	429.9	593.3
52.5°	97.5	103.0	170.3	380.4	539.8
55°	85.2	89.3	125.0	326.9	484.8
57.5°	71.4	76.9	98.9	274.7	428.5
60°	60.4	63.2	87.9	226.6	372.2
62.5°	49.4	52.2	78.3	178.5	309.0
65°	39.8	42.6	68.7	131.8	248.6
67.5°	33.0	34.3	57.7	93.4	190.9
70°	27.5	28.8	48.1	64.6	134.6
72.5°	23.3	27.5	38.5	46.7	85.2
75°	19.2	26.1	31.6	33.0	41.2
77.5°	16.5	24.7	26.1	26.1	23.3
80°	13.7	20.6	22.0	20.6	19.2
82.5°	11.0	16.5	17.9	17.9	15.1
85°	8.2	13.7	16.5	15.1	11.0
87.5°	5.5	12.4	13.7	12.4	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)