

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: P1061457

Luminaire Tested: S125RDR-S1090D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061457
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-S1090D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

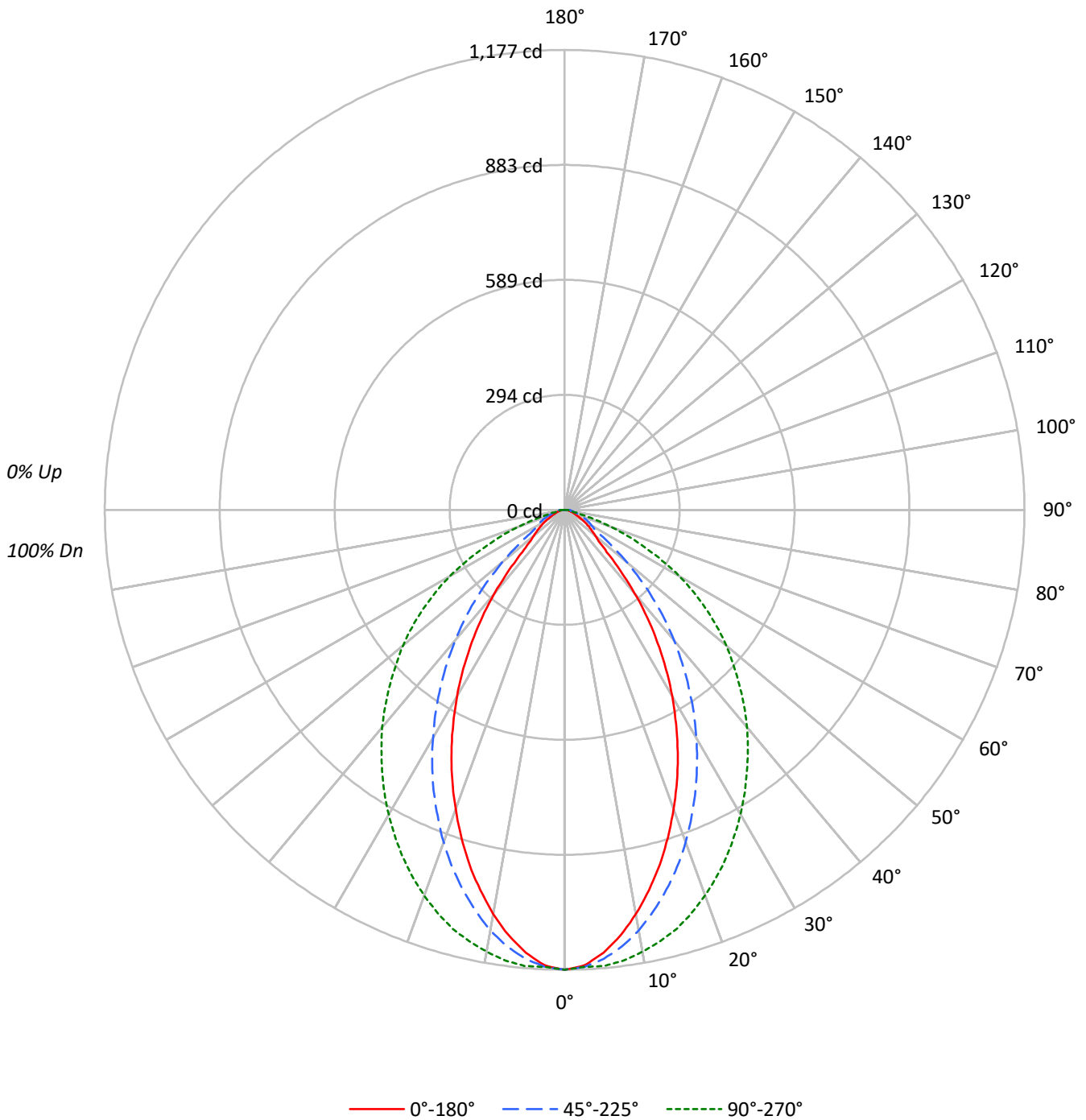
Lumens per Lamp: N/A
Luminaire Lumens: 1704.7 lumens
Efficiency: N/A
Efficacy: 48.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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°	8103	8103	8103
5°	7866	7970	8100
10°	7345	7642	8027
15°	6704	7177	7907
20°	5975	6635	7698
25°	5207	6024	7449
30°	4375	5359	7159
35°	3480	4657	6844
40°	2507	3912	6531
45°	1486	3105	6150
50°	1099	2211	5787
55°	930	1366	5300
60°	757	1102	4667
65°	591	1018	3688
70°	503	882	2468
75°	466	766	998
80°	496	793	694
85°	592	1185	790

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6150 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.5	6.4
10°-20°	284.9	16.7
20°-30°	372.3	21.8
30°-40°	362.7	21.3
40°-50°	272.1	16.0
50°-60°	170.6	10.0
60°-70°	88.8	5.2
70°-80°	32.1	1.9
80°-90°	12.7	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°	765.7	44.9
0°-40°	1128.4	66.2
0°-60°	1571.0	92.2
0°-90°	1704.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1704.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1177	1177	1177	1177	1177	
5°	1138	1153	1153	1162	1172	106
15°	940	968	1007	1069	1109	262
25°	685	723	793	900	980	313
35°	414	458	554	702	814	257
45°	153	198	319	493	632	128
55°	78	81	114	298	442	69
65°	36	39	62	120	226	37
75°	18	24	29	30	38	19
85°	8	12	15	14	10	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1176.9	1176.9	1176.9	1176.9	1176.9
2.5°	1166.9	1178.1	1170.6	1170.6	1170.6
5°	1138.1	1153.1	1153.1	1161.9	1171.9
7.5°	1098.1	1115.6	1126.8	1148.1	1163.1
10°	1050.6	1071.8	1093.1	1128.1	1148.1
12.5°	996.8	1021.8	1051.8	1100.6	1130.6
15°	940.5	968.0	1006.8	1069.3	1109.3
17.5°	879.2	911.7	958.0	1033.0	1081.8
20°	815.4	847.9	905.5	990.5	1050.6
22.5°	751.6	786.7	849.2	945.5	1016.8
25°	685.4	722.9	792.9	900.5	980.5
27.5°	617.8	656.6	734.1	854.2	940.5
30°	550.3	590.3	674.1	804.2	900.5
32.5°	482.8	525.3	614.1	752.9	858.0
35°	414.0	457.7	554.0	701.6	814.2
37.5°	347.7	391.5	494.0	649.1	770.4
40°	278.9	326.4	435.2	596.6	726.6
42.5°	211.4	260.1	376.4	544.0	679.1
45°	152.6	197.6	318.9	492.8	631.6
47.5°	117.6	142.6	260.1	440.2	585.3
50°	102.6	110.1	206.4	391.5	540.3
52.5°	88.8	93.8	155.1	346.4	491.5
55°	77.5	81.3	113.8	297.7	441.5
57.5°	65.0	70.0	90.0	250.1	390.2
60°	55.0	57.5	80.0	206.4	338.9
62.5°	45.0	47.5	71.3	162.6	281.4
65°	36.3	38.8	62.5	120.1	226.4
67.5°	30.0	31.3	52.5	85.0	173.8
70°	25.0	26.3	43.8	58.8	122.6
72.5°	21.3	25.0	35.0	42.5	77.5
75°	17.5	23.8	28.8	30.0	37.5
77.5°	15.0	22.5	23.8	23.8	21.3
80°	12.5	18.8	20.0	18.8	17.5
82.5°	10.0	15.0	16.3	16.3	13.8
85°	7.5	12.5	15.0	13.8	10.0
87.5°	5.0	11.3	12.5	11.3	7.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)