

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: P1061441

Luminaire Tested: S125RDR-S1090D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061441
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S1090D830-X4F0-XX-UDD-WVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

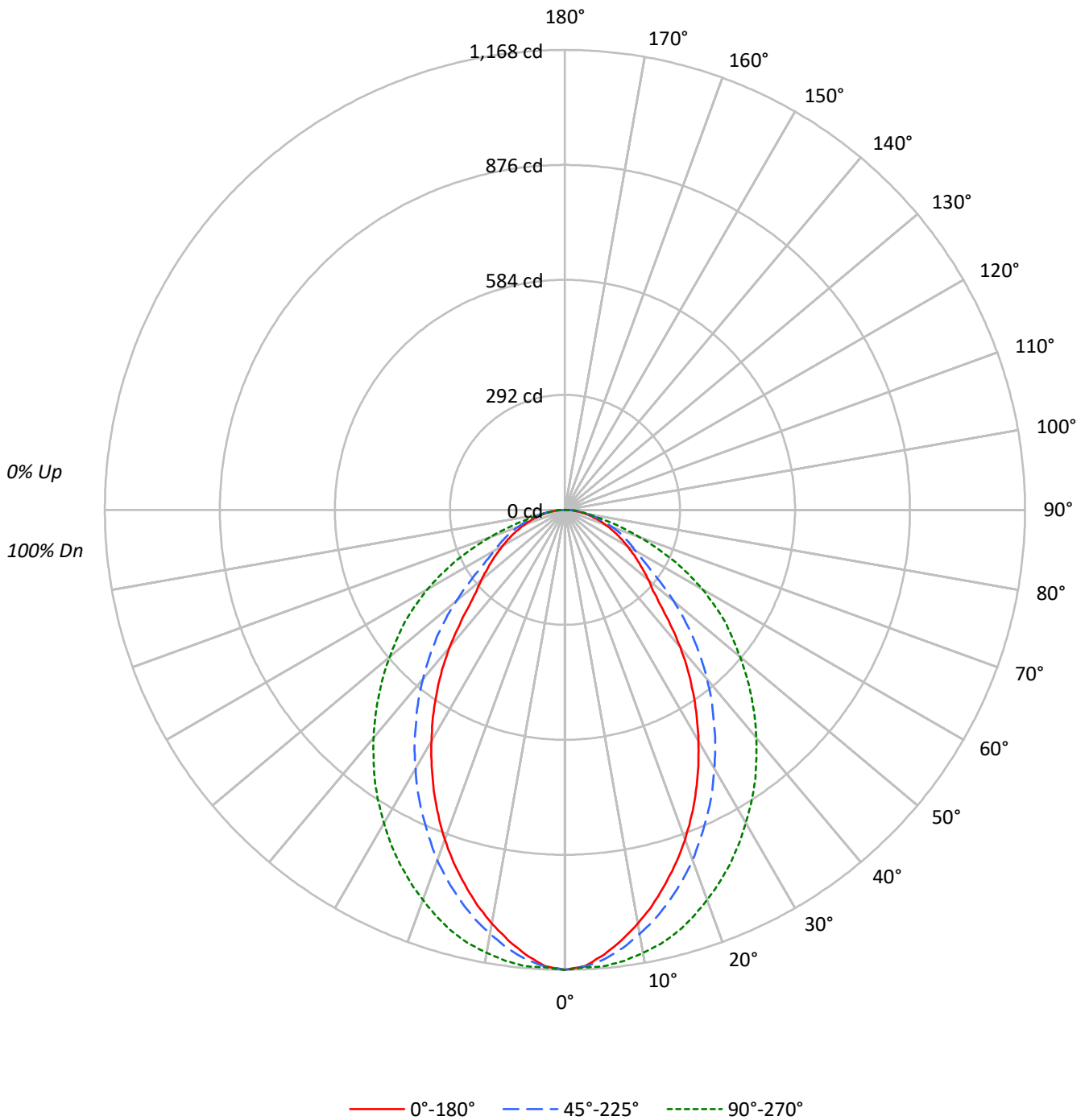
Lumens per Lamp: N/A
Luminaire Lumens: 2189.6 lumens
Efficiency: N/A
Efficacy: 62.6 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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				
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	74	69	77	72	68	74	70	66	64				
4	86	75	67	61	84	74	67	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	48	59	52	47	58	52	47	56	51	46	44				
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36				
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33				
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8042	8042	8042
5°	7838	7919	8040
10°	7456	7644	7986
15°	7011	7319	7902
20°	6531	6942	7729
25°	5983	6498	7535
30°	5390	6030	7301
35°	4767	5542	7071
40°	4090	5044	6796
45°	3340	4488	6510
50°	2962	3850	6212
55°	2718	3193	5953
60°	2506	2828	5544
65°	2338	2719	4943
70°	2184	2583	4040
75°	2016	2421	2979
80°	1895	2268	2173
85°	1754	2212	1841

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6510 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.1	4.9
10°-20°	291.2	13.3
20°-30°	400.1	18.3
30°-40°	424.1	19.4
40°-50°	370.2	16.9
50°-60°	281.2	12.8
60°-70°	188.4	8.6
70°-80°	97.1	4.4
80°-90°	29.1	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°	799.4	36.5
0°-40°	1223.5	55.9
0°-60°	1874.9	85.6
0°-90°	2189.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2189.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1168	1168	1168	1168	1168	
5°	1134	1146	1146	1154	1163	106
15°	984	1002	1027	1072	1108	276
25°	788	812	855	926	992	361
35°	567	600	659	753	841	354
45°	343	377	461	571	669	271
55°	226	233	266	391	496	203
65°	144	147	167	223	303	142
75°	76	80	91	97	112	81
85°	22	28	28	26	23	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1168.0	1168.0	1168.0	1168.0	1168.0
2.5°	1159.8	1168.0	1161.0	1161.0	1163.3
5°	1134.1	1145.8	1145.8	1154.0	1163.3
7.5°	1102.6	1115.5	1122.5	1141.1	1155.1
10°	1066.5	1080.5	1093.3	1121.3	1142.3
12.5°	1028.0	1043.1	1063.0	1099.1	1128.3
15°	983.6	1002.3	1026.8	1072.3	1108.5
17.5°	939.3	958.0	988.3	1042.0	1082.8
20°	891.4	911.3	947.5	1005.8	1054.8
22.5°	840.1	862.3	900.8	967.3	1024.5
25°	787.6	812.1	855.3	926.5	991.8
27.5°	732.8	761.9	808.6	884.4	956.8
30°	677.9	707.1	758.4	841.3	918.3
32.5°	623.1	654.6	710.6	798.1	880.9
35°	567.1	599.7	659.3	752.6	841.3
37.5°	512.2	544.9	611.4	708.3	798.1
40°	455.1	488.9	561.2	662.8	756.1
42.5°	396.7	432.9	511.1	616.1	712.9
45°	343.0	376.9	460.9	570.6	668.6
47.5°	303.4	325.5	410.7	523.9	625.4
50°	276.5	288.2	359.4	478.4	579.9
52.5°	249.7	259.0	311.5	431.7	536.7
55°	226.4	233.4	266.0	390.9	495.9
57.5°	203.0	210.0	231.0	350.0	448.1
60°	182.0	187.9	205.4	306.9	402.6
62.5°	162.2	166.9	185.5	266.0	353.5
65°	143.5	147.0	166.9	222.9	303.4
67.5°	124.8	128.3	148.2	182.0	249.7
70°	108.5	109.7	128.3	148.2	200.7
72.5°	92.2	93.3	108.5	120.2	154.0
75°	75.8	80.5	91.0	96.8	112.0
77.5°	61.8	67.7	73.5	75.8	75.8
80°	47.8	54.8	57.2	57.2	54.8
82.5°	35.0	40.8	42.0	39.7	37.3
85°	22.2	28.0	28.0	25.7	23.3
87.5°	10.5	15.2	15.2	14.0	10.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)