

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1061846

Luminaire Tested: S125RDR-H1090D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061846
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-H1090D830-X4F0-XX-UDD-WVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

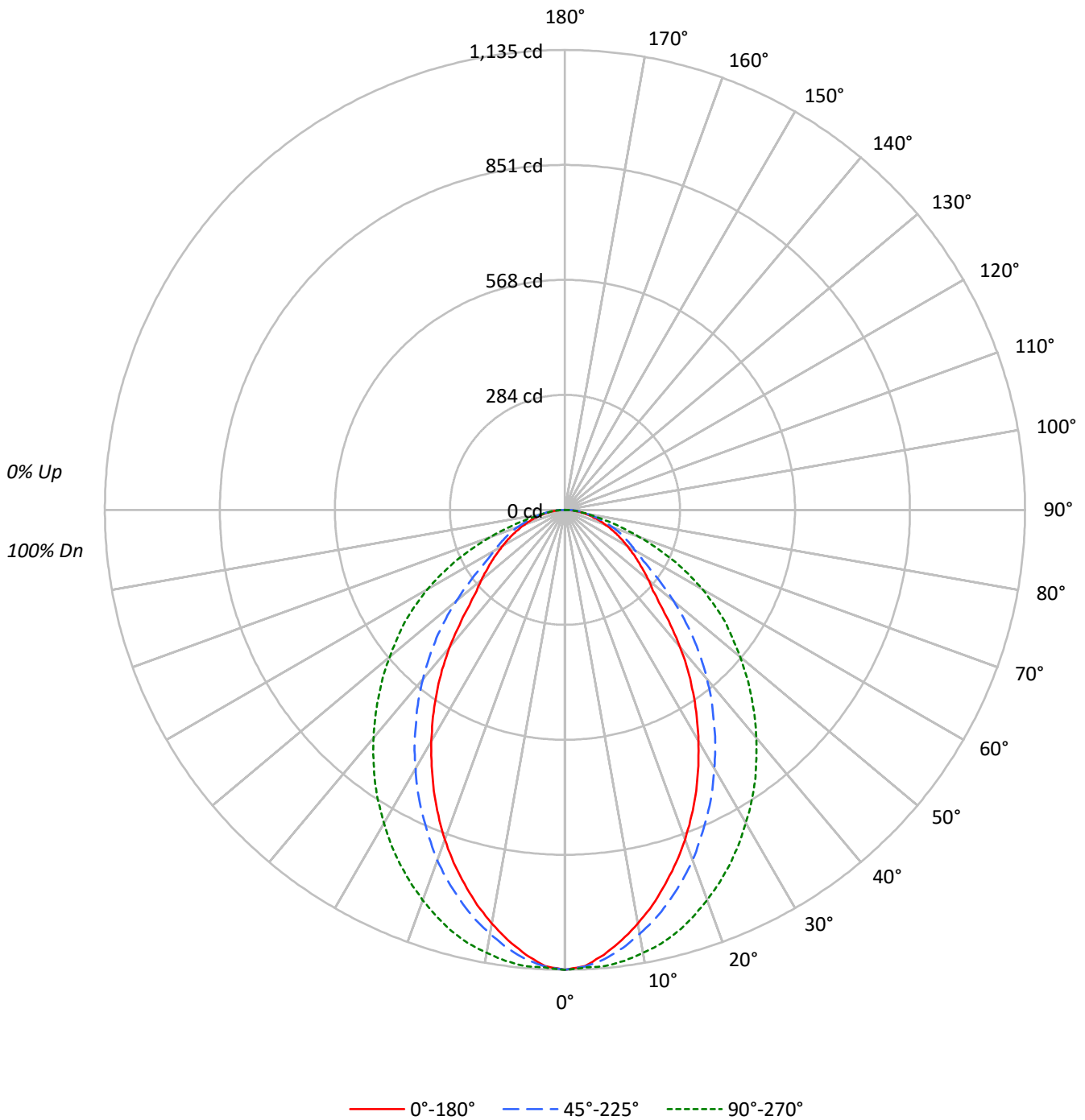
Lumens per Lamp: N/A
Luminaire Lumens: 2127.9 lumens
Efficiency: N/A
Efficacy: 68.2 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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									
RC	80									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°	7815	7815	7815
5°	7618	7696	7813
10°	7246	7428	7761
15°	6814	7113	7678
20°	6347	6747	7511
25°	5815	6315	7322
30°	5238	5860	7095
35°	4632	5385	6872
40°	3975	4902	6604
45°	3246	4361	6326
50°	2878	3742	6037
55°	2641	3103	5785
60°	2436	2749	5387
65°	2273	2643	4803
70°	2124	2510	3926
75°	1961	2352	2897
80°	1844	2205	2113
85°	1698	2149	1793

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6326 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.0	4.9
10°-20°	282.9	13.3
20°-30°	388.9	18.3
30°-40°	412.1	19.4
40°-50°	359.7	16.9
50°-60°	273.3	12.8
60°-70°	183.1	8.6
70°-80°	94.4	4.4
80°-90°	28.3	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°	776.8	36.5
0°-40°	1189.0	55.9
0°-60°	1822.0	85.6
0°-90°	2127.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2127.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1135	1135	1135	1135	1135	
5°	1102	1114	1114	1122	1130	103
15°	956	974	998	1042	1077	268
25°	765	789	831	900	964	351
35°	551	583	641	731	818	344
45°	333	366	448	554	650	263
55°	220	227	258	380	482	197
65°	140	143	162	217	295	138
75°	74	78	88	94	109	79
85°	22	27	27	25	23	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1135.1	1135.1	1135.1	1135.1	1135.1
2.5°	1127.1	1135.1	1128.3	1128.3	1130.5
5°	1102.2	1113.5	1113.5	1121.5	1130.5
7.5°	1071.6	1084.0	1090.8	1109.0	1122.6
10°	1036.4	1050.0	1062.5	1089.7	1110.1
12.5°	999.0	1013.7	1033.0	1068.2	1096.5
15°	955.9	974.0	997.9	1042.1	1077.2
17.5°	912.8	931.0	960.4	1012.6	1052.3
20°	866.3	885.6	920.8	977.4	1025.1
22.5°	816.4	838.0	875.4	940.0	995.6
25°	765.4	789.2	831.2	900.3	963.8
27.5°	712.1	740.5	785.8	859.5	929.8
30°	658.8	687.2	737.1	817.6	892.4
32.5°	605.5	636.1	690.6	775.6	856.1
35°	551.1	582.8	640.7	731.4	817.6
37.5°	497.8	529.5	594.2	688.3	775.6
40°	442.2	475.1	545.4	644.1	734.8
42.5°	385.5	420.7	496.7	598.7	692.8
45°	333.4	366.3	447.9	554.5	649.7
47.5°	294.8	316.4	399.1	509.1	607.8
50°	268.7	280.1	349.3	464.9	563.6
52.5°	242.7	251.7	302.8	419.6	521.6
55°	220.0	226.8	258.5	379.9	481.9
57.5°	197.3	204.1	224.5	340.2	435.4
60°	176.9	182.6	199.6	298.2	391.2
62.5°	157.6	162.2	180.3	258.5	343.6
65°	139.5	142.9	162.2	216.6	294.8
67.5°	121.3	124.7	144.0	176.9	242.7
70°	105.5	106.6	124.7	144.0	195.0
72.5°	89.6	90.7	105.5	116.8	149.7
75°	73.7	78.2	88.4	94.1	108.9
77.5°	60.1	65.8	71.4	73.7	73.7
80°	46.5	53.3	55.6	55.6	53.3
82.5°	34.0	39.7	40.8	38.6	36.3
85°	21.5	27.2	27.2	24.9	22.7
87.5°	10.2	14.7	14.7	13.6	10.2
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	13.75	15.25	14.12	15.56	15.87	17.68	19.17	18.04	19.49	19.80
	3H	15.32	16.66	15.70	16.99	17.35	19.10	20.44	19.48	20.77	21.13
	4H	15.93	17.19	16.33	17.54	17.92	19.51	20.77	19.91	21.12	21.50
	6H	16.43	17.59	16.84	17.96	18.35	19.73	20.89	20.14	21.26	21.65
	8H	16.60	17.71	17.03	18.10	18.50	19.79	20.90	20.22	21.29	21.69
	12H	16.73	17.79	17.16	18.17	18.60	19.82	20.88	20.26	21.27	21.70
4H	2H	14.49	15.75	14.89	16.10	16.47	17.80	19.06	18.20	19.41	19.79
	3H	16.27	17.31	16.68	17.71	18.11	19.41	20.46	19.82	20.86	21.26
	4H	17.00	17.94	17.43	18.36	18.80	19.94	20.88	20.37	21.30	21.74
	6H	17.64	18.46	18.10	18.90	19.36	20.28	21.10	20.74	21.54	22.00
	8H	17.87	18.63	18.33	19.08	19.54	20.38	21.15	20.85	21.59	22.06
	12H	18.04	18.72	18.52	19.20	19.67	20.46	21.14	20.94	21.62	22.09
8H	4H	17.40	18.17	17.87	18.61	19.08	20.05	20.81	20.51	21.26	21.72
	6H	18.19	18.82	18.69	19.31	19.79	20.49	21.12	20.98	21.61	22.09
	8H	18.51	19.08	19.03	19.59	20.08	20.64	21.21	21.16	21.72	22.21
	12H	18.79	19.29	19.30	19.78	20.35	20.78	21.28	21.29	21.77	22.34
12H	4H	17.45	18.13	17.93	18.61	19.08	20.05	20.73	20.53	21.21	21.68
	6H	18.27	18.84	18.79	19.35	19.84	20.50	21.07	21.02	21.58	22.07
	8H	18.67	19.17	19.18	19.66	20.23	20.71	21.21	21.22	21.71	22.27