

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: P1062215

Luminaire Tested: S125RDR-H850D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062215
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-H850D930-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, 90 CRI LEDS
Ballast/Driver: -

Summary

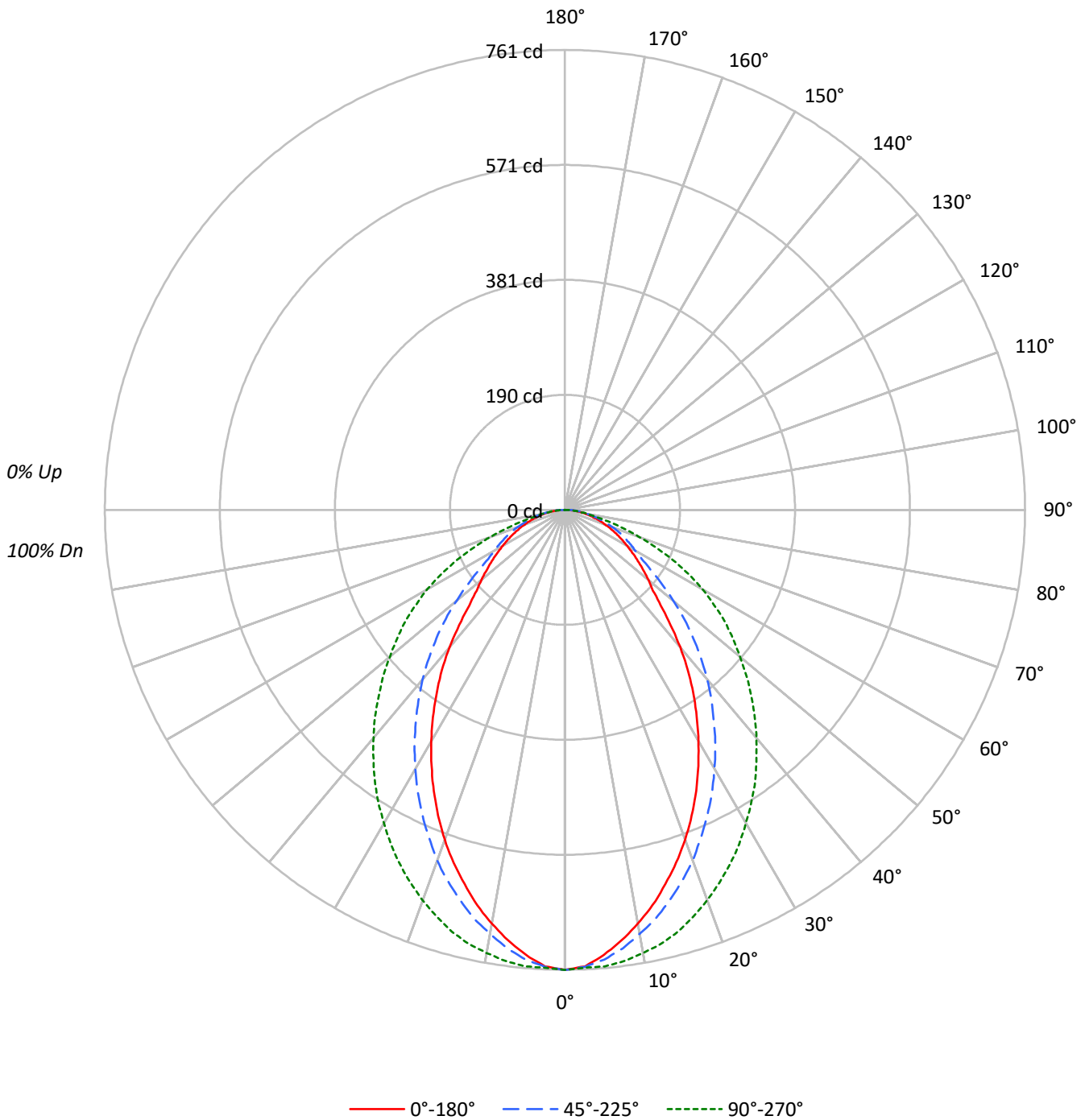
Lumens per Lamp: N/A
Luminaire Lumens: 1427.2 lumens
Efficiency: N/A
Efficacy: 60.7 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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°	5242	5242	5242
5°	5110	5162	5241
10°	4860	4982	5206
15°	4571	4771	5150
20°	4258	4525	5037
25°	3900	4235	4911
30°	3513	3931	4759
35°	3107	3612	4609
40°	2666	3288	4429
45°	2177	2925	4243
50°	1931	2510	4049
55°	1771	2082	3880
60°	1633	1844	3613
65°	1523	1773	3221
70°	1423	1685	2633
75°	1314	1578	1942
80°	1237	1479	1416
85°	1145	1446	1201

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4243 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.5	4.9
10°-20°	189.8	13.3
20°-30°	260.8	18.3
30°-40°	276.4	19.4
40°-50°	241.3	16.9
50°-60°	183.3	12.8
60°-70°	122.8	8.6
70°-80°	63.3	4.4
80°-90°	19.0	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°	521.1	36.5
0°-40°	797.5	55.9
0°-60°	1222.1	85.6
0°-90°	1427.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1427.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	761	761	761	761	761	
5°	739	747	747	752	758	69
15°	641	653	669	699	722	180
25°	513	529	558	604	646	235
35°	370	391	430	491	548	230
45°	224	246	300	372	436	177
55°	148	152	173	255	323	132
65°	94	96	109	145	198	93
75°	49	52	59	63	73	53
85°	14	18	18	17	15	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	761.3	761.3	761.3	761.3	761.3
2.5°	756.0	761.3	756.8	756.8	758.3
5°	739.3	746.9	746.9	752.2	758.3
7.5°	718.7	727.1	731.7	743.8	753.0
10°	695.2	704.3	712.6	730.9	744.6
12.5°	670.1	679.9	692.9	716.4	735.5
15°	641.2	653.3	669.3	699.0	722.5
17.5°	612.3	624.4	644.2	679.2	705.8
20°	581.1	594.0	617.6	655.6	687.5
22.5°	547.6	562.1	587.2	630.5	667.8
25°	513.4	529.4	557.5	603.9	646.5
27.5°	477.6	496.6	527.1	576.5	623.7
30°	441.9	460.9	494.4	548.4	598.6
32.5°	406.1	426.7	463.2	520.2	574.2
35°	369.6	390.9	429.7	490.6	548.4
37.5°	333.9	355.2	398.5	461.7	520.2
40°	296.6	318.7	365.8	432.0	492.8
42.5°	258.6	282.2	333.1	401.6	464.7
45°	223.6	245.7	300.4	371.9	435.8
47.5°	197.7	212.2	267.7	341.5	407.7
50°	180.3	187.9	234.3	311.8	378.0
52.5°	162.8	168.8	203.1	281.4	349.9
55°	147.5	152.1	173.4	254.8	323.2
57.5°	132.3	136.9	150.6	228.2	292.1
60°	118.6	122.5	133.9	200.0	262.4
62.5°	105.7	108.8	120.9	173.4	230.5
65°	93.5	95.8	108.8	145.3	197.7
67.5°	81.4	83.7	96.6	118.6	162.8
70°	70.7	71.5	83.7	96.6	130.8
72.5°	60.1	60.8	70.7	78.3	100.4
75°	49.4	52.5	59.3	63.1	73.0
77.5°	40.3	44.1	47.9	49.4	49.4
80°	31.2	35.7	37.3	37.3	35.7
82.5°	22.8	26.6	27.4	25.9	24.3
85°	14.5	18.3	18.3	16.7	15.2
87.5°	6.8	9.9	9.9	9.1	6.8
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	12.36	13.86	12.73	14.17	14.49	16.29	17.79	16.66	18.10	18.42
	3H	13.93	15.28	14.31	15.60	15.97	17.71	19.06	18.09	19.38	19.75
	4H	14.55	15.81	14.95	16.16	16.53	18.13	19.39	18.53	19.73	20.11
	6H	15.04	16.20	15.45	16.57	16.96	18.34	19.51	18.76	19.87	20.27
	8H	15.22	16.32	15.64	16.71	17.11	18.40	19.51	18.83	19.90	20.30
	12H	15.34	16.40	15.77	16.78	17.21	18.44	19.50	18.87	19.88	20.31
4H	2H	13.10	14.36	13.50	14.71	15.09	16.42	17.68	16.82	18.03	18.40
	3H	14.88	15.92	15.29	16.32	16.73	18.03	19.07	18.44	19.47	19.87
	4H	15.61	16.56	16.05	16.97	17.41	18.55	19.49	18.99	19.91	20.35
	6H	16.25	17.07	16.71	17.51	17.97	18.90	19.71	19.35	20.16	20.62
	8H	16.48	17.24	16.94	17.69	18.15	18.99	19.76	19.46	20.20	20.67
	12H	16.65	17.34	17.13	17.81	18.29	19.07	19.75	19.55	20.23	20.70
8H	4H	16.01	16.78	16.48	17.22	17.69	18.66	19.42	19.12	19.87	20.34
	6H	16.80	17.43	17.30	17.92	18.40	19.10	19.73	19.60	20.22	20.70
	8H	17.12	17.69	17.64	18.20	18.69	19.26	19.82	19.77	20.33	20.82
	12H	17.40	17.90	17.91	18.39	18.96	19.39	19.89	19.90	20.39	20.95
12H	4H	16.06	16.74	16.54	17.22	17.69	18.66	19.34	19.14	19.82	20.29
	6H	16.88	17.45	17.40	17.96	18.45	19.11	19.68	19.63	20.19	20.68
	8H	17.28	17.78	17.79	18.27	18.84	19.32	19.82	19.83	20.32	20.88