

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: P1062015

Luminaire Tested: S125RDR-H375D835-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062015
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-H375D835-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

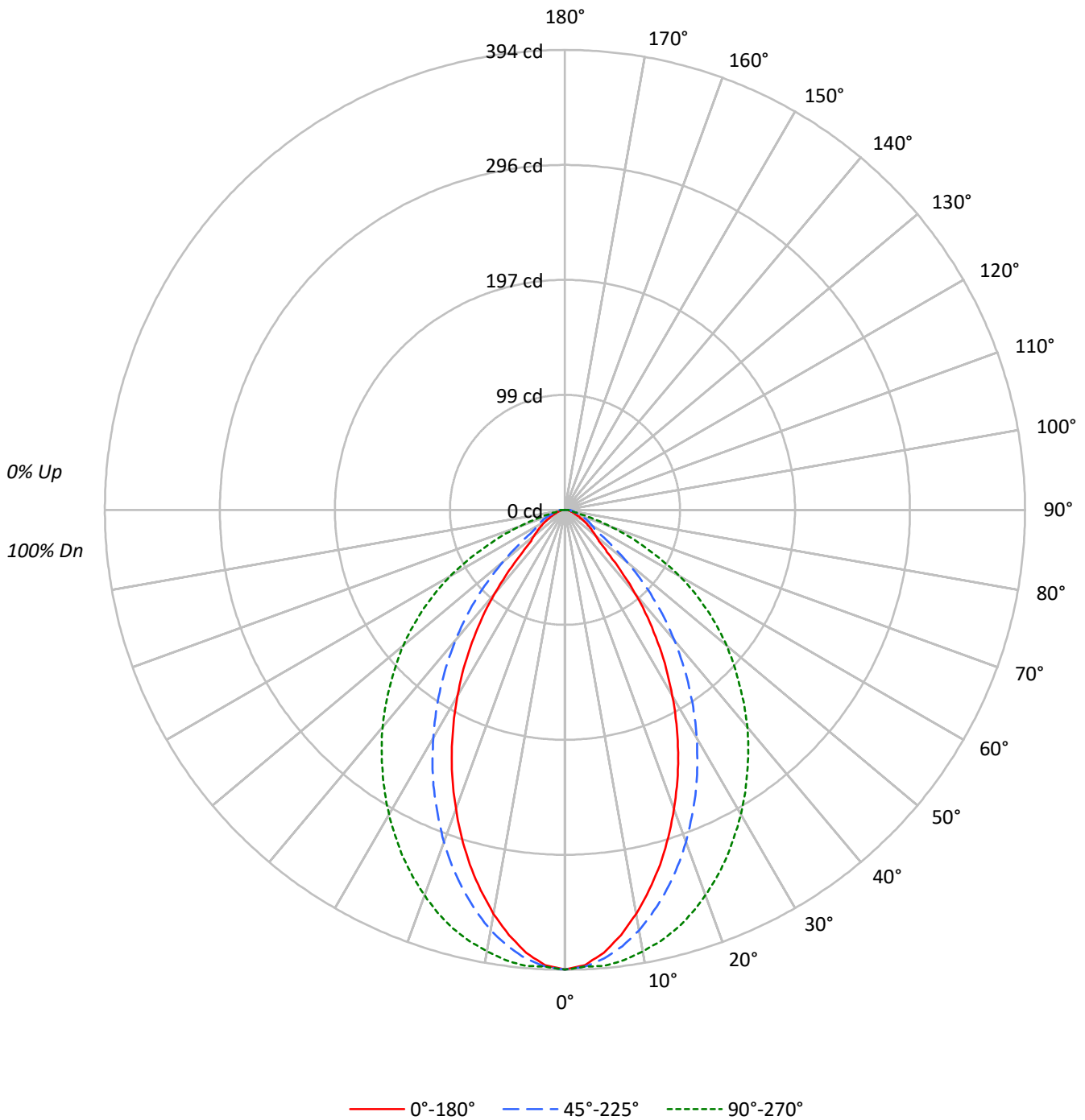
Lumens per Lamp: N/A
Luminaire Lumens: 570.3 lumens
Efficiency: N/A
Efficacy: 48.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89				
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70				
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56				
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51				
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39				
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2711	2711	2711
5°	2632	2666	2710
10°	2457	2557	2685
15°	2243	2401	2646
20°	1999	2220	2575
25°	1742	2015	2493
30°	1464	1793	2395
35°	1164	1558	2290
40°	839	1309	2185
45°	497	1039	2057
50°	367	739	1937
55°	311	457	1773
60°	253	369	1562
65°	197	340	1233
70°	169	294	825
75°	157	255	335
80°	167	266	234
85°	197	395	261

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2057 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.3	6.4
10°-20°	95.3	16.7
20°-30°	124.6	21.8
30°-40°	121.4	21.3
40°-50°	91.0	16.0
50°-60°	57.1	10.0
60°-70°	29.7	5.2
70°-80°	10.8	1.9
80°-90°	4.3	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°	256.2	44.9
0°-40°	377.5	66.2
0°-60°	525.6	92.2
0°-90°	570.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	570.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	394	394	394	394	394	
5°	381	386	386	389	392	35
15°	315	324	337	358	371	88
25°	229	242	265	301	328	105
35°	138	153	185	235	272	86
45°	51	66	107	165	211	43
55°	26	27	38	100	148	23
65°	12	13	21	40	76	12
75°	6	8	10	10	13	6
85°	2	4	5	5	3	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	393.8	393.8	393.8	393.8	393.8
2.5°	390.4	394.2	391.7	391.7	391.7
5°	380.8	385.8	385.8	388.7	392.1
7.5°	367.4	373.2	377.0	384.1	389.1
10°	351.5	358.6	365.7	377.4	384.1
12.5°	333.5	341.9	351.9	368.2	378.3
15°	314.7	323.9	336.8	357.8	371.2
17.5°	294.2	305.0	320.5	345.6	362.0
20°	272.8	283.7	303.0	331.4	351.5
22.5°	251.5	263.2	284.1	316.3	340.2
25°	229.3	241.9	265.3	301.3	328.1
27.5°	206.7	219.7	245.6	285.8	314.7
30°	184.1	197.5	225.5	269.1	301.3
32.5°	161.5	175.7	205.5	251.9	287.1
35°	138.5	153.1	185.4	234.7	272.4
37.5°	116.3	131.0	165.3	217.2	257.8
40°	93.3	109.2	145.6	199.6	243.1
42.5°	70.7	87.0	126.0	182.0	227.2
45°	51.0	66.1	106.7	164.9	211.3
47.5°	39.3	47.7	87.0	147.3	195.8
50°	34.3	36.8	69.0	131.0	180.8
52.5°	29.7	31.4	51.9	115.9	164.4
55°	25.9	27.2	38.1	99.6	147.7
57.5°	21.8	23.4	30.1	83.7	130.6
60°	18.4	19.2	26.8	69.0	113.4
62.5°	15.1	15.9	23.9	54.4	94.1
65°	12.1	13.0	20.9	40.2	75.7
67.5°	10.0	10.5	17.6	28.5	58.2
70°	8.4	8.8	14.6	19.7	41.0
72.5°	7.1	8.4	11.7	14.2	25.9
75°	5.9	8.0	9.6	10.0	12.6
77.5°	5.0	7.5	8.0	8.0	7.1
80°	4.2	6.3	6.7	6.3	5.9
82.5°	3.3	5.0	5.4	5.4	4.6
85°	2.5	4.2	5.0	4.6	3.3
87.5°	1.7	3.8	4.2	3.8	2.5
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	3.38	4.73	3.74	5.04	5.36	13.00	14.35	13.36	14.66	14.98
	3H	4.24	5.44	4.62	5.77	6.13	13.84	15.04	14.22	15.37	15.73
	4H	4.67	5.78	5.07	6.14	6.52	13.91	15.03	14.32	15.38	15.77
	6H	5.09	6.12	5.51	6.49	6.88	13.90	14.92	14.31	15.29	15.69
	8H	5.27	6.24	5.70	6.63	7.04	13.88	14.86	14.31	15.25	15.65
	12H	5.43	6.36	5.86	6.74	7.17	13.87	14.80	14.30	15.19	15.62
4H	2H	4.34	5.46	4.74	5.81	6.19	12.86	13.98	13.26	14.33	14.71
	3H	5.40	6.31	5.81	6.71	7.12	13.77	14.69	14.18	15.09	15.49
	4H	5.96	6.78	6.40	7.20	7.64	13.87	14.69	14.31	15.11	15.55
	6H	6.56	7.27	7.02	7.72	8.18	13.90	14.61	14.36	15.05	15.52
	8H	6.80	7.46	7.27	7.90	8.38	13.90	14.56	14.37	15.01	15.48
	12H	7.02	7.61	7.51	8.09	8.56	13.91	14.50	14.40	14.98	15.45
8H	4H	6.44	7.10	6.90	7.54	8.01	13.80	14.46	14.27	14.91	15.38
	6H	7.25	7.79	7.75	8.28	8.76	13.85	14.39	14.35	14.89	15.37
	8H	7.62	8.11	8.14	8.62	9.12	13.88	14.37	14.41	14.89	15.38
	12H	8.01	8.44	8.53	8.94	9.51	13.95	14.38	14.46	14.87	15.44
12H	4H	6.49	7.07	6.97	7.55	8.03	13.76	14.35	14.25	14.83	15.31
	6H	7.37	7.86	7.89	8.37	8.86	13.82	14.31	14.34	14.82	15.31
	8H	7.85	8.28	8.37	8.78	9.35	13.89	14.32	14.40	14.81	15.38