

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: P1062004

Luminaire Tested: S125RDR-H375D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062004
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H375D830-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

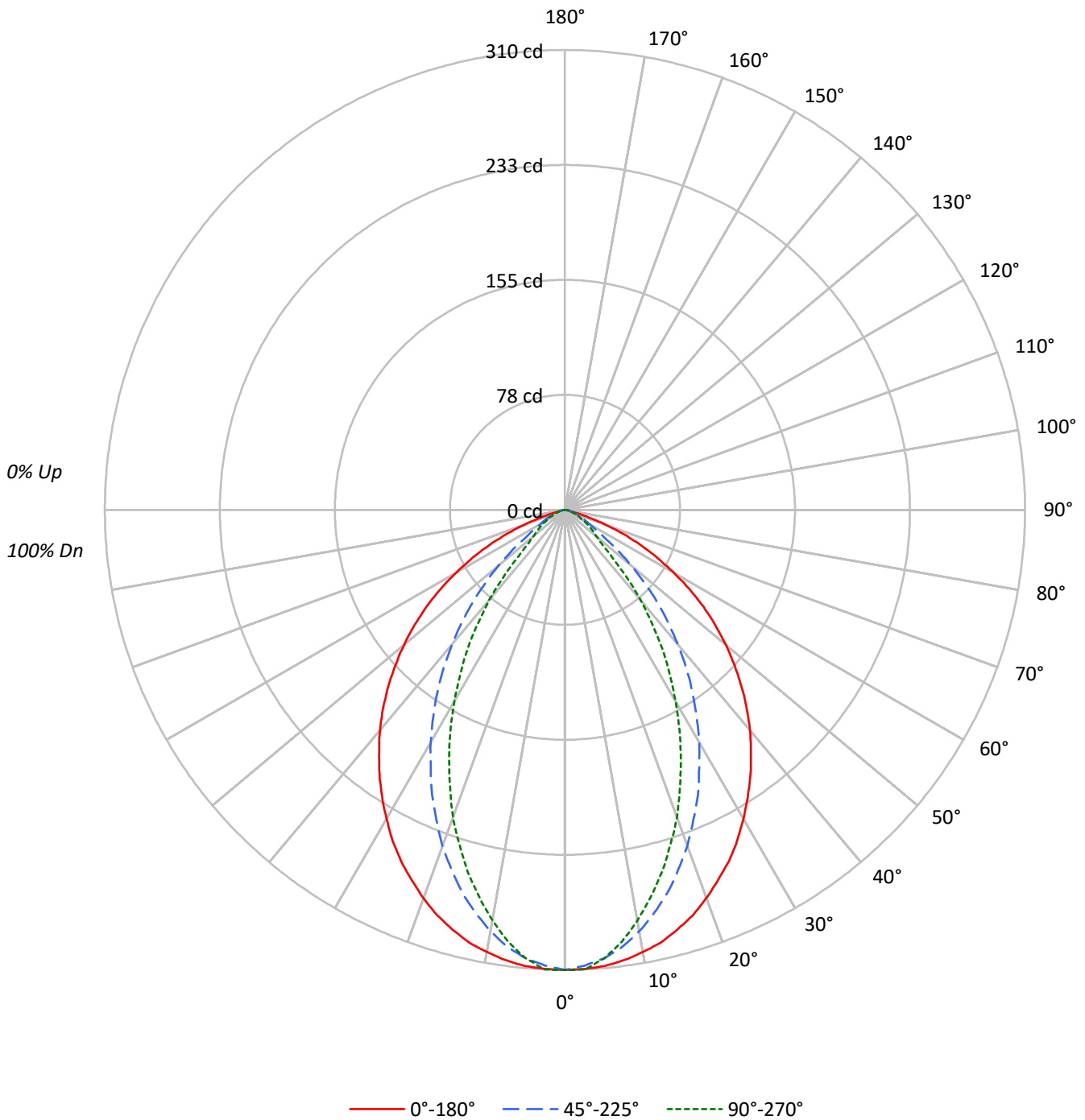
Lumens per Lamp: N/A
Luminaire Lumens: 448.5 lumens
Efficiency: N/A
Efficacy: 38.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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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CATALOG NUMBER: S125RDR-H375D830-X4F0-XX-UDD-SVL-B

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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63				
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57				
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52				
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47				
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43				
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2135	2135	2135
5°	2133	2097	2097
10°	2116	2017	1965
15°	2087	1905	1801
20°	2041	1767	1617
25°	1985	1611	1404
30°	1911	1438	1185
35°	1832	1258	961
40°	1743	1062	712
45°	1639	852	429
50°	1516	624	296
55°	1367	383	246
60°	1161	260	196
65°	919	199	155
70°	580	143	127
75°	189	104	104
80°	63	79	95
85°	32	63	63

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1639 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.7	6.4
10°-20°	75.8	16.9
20°-30°	99.6	22.2
30°-40°	97.9	21.8
40°-50°	74.1	16.5
50°-60°	44.9	10.0
60°-70°	21.2	4.7
70°-80°	5.5	1.2
80°-90°	0.8	0.2
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°	204.1	45.5
0°-40°	302.0	67.3
0°-60°	420.9	93.8
0°-90°	448.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	448.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	310	310	310	310	310	
5°	309	308	303	304	303	29
15°	293	285	267	257	253	82
25°	261	242	212	192	185	120
35°	218	189	150	123	114	136
45°	168	132	88	56	44	130
55°	114	78	32	22	20	101
65°	56	29	12	10	10	56
75°	7	5	4	4	4	11
85°	0	0	1	1	1	1
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	310.1	310.1	310.1	310.1	310.1
2.5°	309.7	309.7	307.4	310.1	310.1
5°	308.6	307.8	303.4	303.8	303.4
7.5°	306.2	304.6	297.1	295.2	293.6
10°	302.6	299.5	288.5	283.7	281.0
12.5°	298.7	293.2	278.2	271.5	267.2
15°	292.8	284.9	267.2	256.9	252.6
17.5°	286.5	275.1	254.2	242.0	236.4
20°	278.6	265.2	241.2	226.2	220.7
22.5°	269.9	254.2	226.2	209.6	202.2
25°	261.3	241.6	212.0	192.3	184.8
27.5°	251.4	229.0	195.8	175.4	167.1
30°	240.4	216.3	180.9	159.6	149.0
32.5°	229.3	203.3	165.1	141.9	131.2
35°	217.9	188.8	149.7	123.3	114.3
37.5°	205.7	175.0	134.0	106.4	95.8
40°	193.9	161.2	118.2	89.1	79.2
42.5°	181.3	147.4	102.5	72.1	61.1
45°	168.3	132.4	87.5	55.6	44.1
47.5°	154.9	119.0	72.5	41.0	33.1
50°	141.5	104.8	58.3	30.3	27.6
52.5°	127.7	91.0	44.1	25.2	24.0
55°	113.9	78.0	31.9	21.7	20.5
57.5°	99.7	63.8	24.0	18.5	17.3
60°	84.3	51.2	18.9	15.4	14.2
62.5°	70.1	40.2	15.4	12.6	11.8
65°	56.4	28.8	12.2	10.2	9.5
67.5°	42.2	19.3	9.5	7.9	7.9
70°	28.8	12.6	7.1	6.3	6.3
72.5°	17.3	7.5	5.1	5.1	5.1
75°	7.1	4.7	3.9	3.9	3.9
77.5°	2.4	2.8	2.8	3.2	3.2
80°	1.6	1.6	2.0	2.4	2.4
82.5°	0.8	1.2	1.2	1.6	1.6
85°	0.4	0.4	0.8	0.8	0.8
87.5°	0.0	0.0	0.0	0.4	0.4
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	11.96	13.29	12.33	13.61	13.92	2.61	3.94	2.98	4.26	4.57
	3H	12.67	13.85	13.05	14.18	14.54	3.40	4.57	3.78	4.90	5.27
	4H	12.69	13.78	13.09	14.13	14.51	3.64	4.74	4.04	5.09	5.47
	6H	12.62	13.62	13.03	13.99	14.39	3.83	4.83	4.24	5.20	5.60
	8H	12.58	13.53	13.01	13.92	14.32	3.88	4.83	4.31	5.22	5.62
	12H	12.53	13.44	12.97	13.83	14.26	3.89	4.79	4.32	5.18	5.61
4H	2H	11.79	12.89	12.20	13.24	13.62	3.10	4.20	3.50	4.55	4.93
	3H	12.54	13.43	12.95	13.84	14.24	4.01	4.90	4.42	5.31	5.71
	4H	12.56	13.35	12.99	13.77	14.22	4.32	5.11	4.75	5.53	5.97
	6H	12.50	13.18	12.96	13.63	14.09	4.59	5.27	5.05	5.72	6.19
	8H	12.45	13.08	12.92	13.53	14.00	4.66	5.30	5.13	5.74	6.21
	12H	12.40	12.96	12.89	13.45	13.92	4.68	5.25	5.17	5.73	6.20
8H	4H	12.44	13.08	12.91	13.53	14.00	4.43	5.07	4.90	5.52	5.99
	6H	12.37	12.89	12.87	13.38	13.86	4.76	5.28	5.27	5.78	6.26
	8H	12.31	12.78	12.83	13.29	13.79	4.87	5.34	5.39	5.85	6.35
	12H	12.27	12.68	12.79	13.18	13.75	4.94	5.35	5.45	5.84	6.42
12H	4H	12.40	12.96	12.88	13.44	13.92	4.40	4.97	4.89	5.45	5.92
	6H	12.31	12.77	12.83	13.29	13.78	4.73	5.20	5.26	5.72	6.21
	8H	12.27	12.69	12.79	13.18	13.75	4.88	5.29	5.39	5.79	6.36