

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: P1062005

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062005
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-86)
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-S
Description: DEFINE 5 SILVER 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

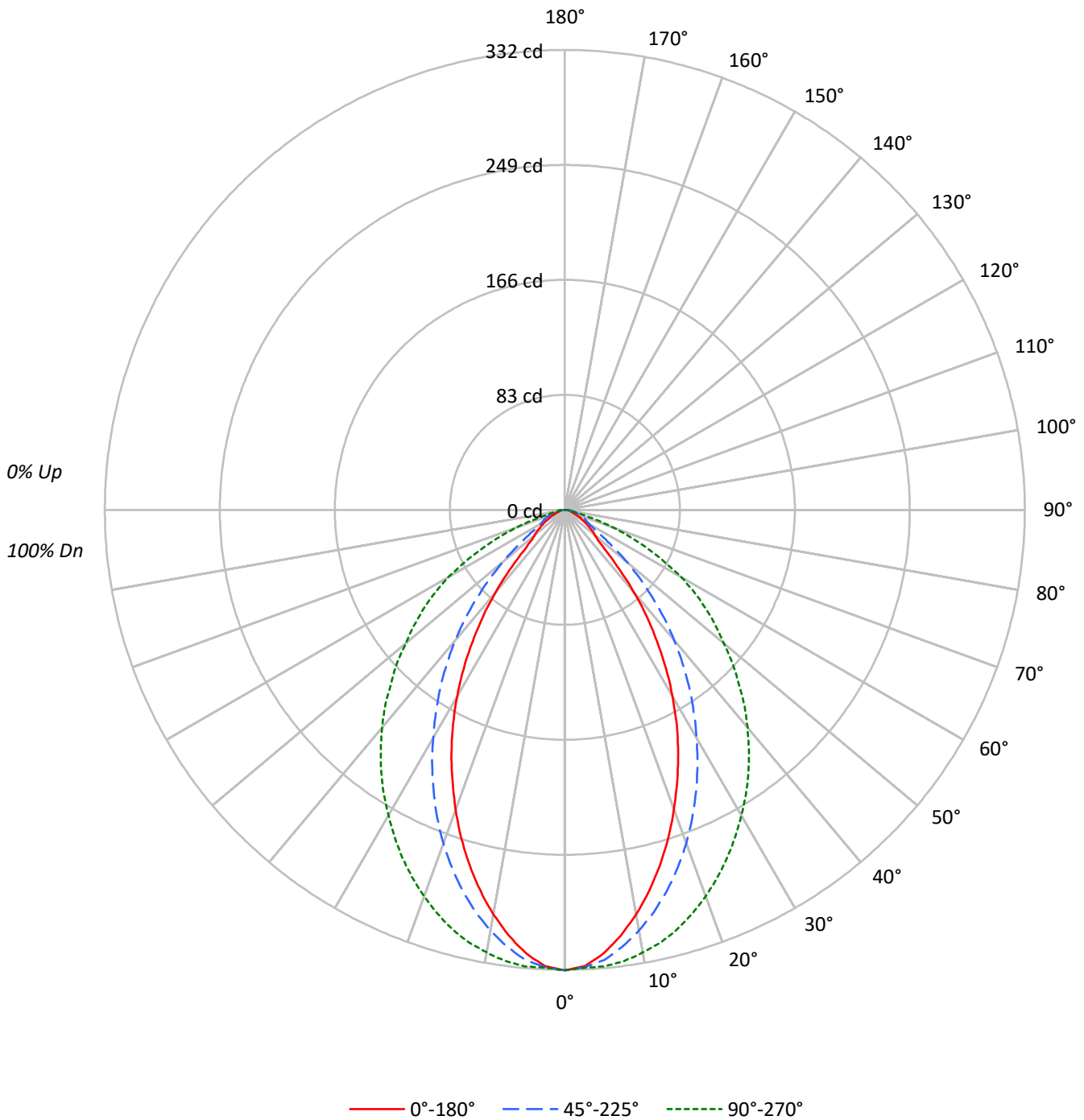
Lumens per Lamp: N/A
Luminaire Lumens: 480.0 lumens
Efficiency: N/A
Efficacy: 41.0 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1062005

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

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	106	103	100	101	99	97	98	96	94	94	93	91	89				
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79				
3	96	88	81	76	94	87	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	63				
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56				
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	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	41	39				
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2289	2289	2289
5°	2221	2254	2286
10°	2073	2156	2269
15°	1892	2029	2235
20°	1687	1878	2175
25°	1471	1702	2106
30°	1235	1511	2025
35°	974	1316	1942
40°	698	1106	1843
45°	411	868	1727
50°	304	626	1605
55°	256	378	1491
60°	207	277	1330
65°	161	264	1067
70°	135	246	723
75°	125	221	314
80°	127	218	202
85°	158	276	221

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1727 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.6	6.4
10°-20°	80.5	16.8
20°-30°	105.2	21.9
30°-40°	102.4	21.3
40°-50°	76.5	15.9
50°-60°	47.4	9.9
60°-70°	24.9	5.2
70°-80°	9.1	1.9
80°-90°	3.4	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°	216.3	45.1
0°-40°	318.6	66.4
0°-60°	442.6	92.2
0°-90°	480.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	480.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	332	332	332	332	332	
5°	321	326	326	328	331	30
15°	265	273	285	302	314	74
25°	194	204	224	254	277	88
35°	116	129	157	198	231	72
45°	42	55	89	139	177	36
55°	21	22	32	82	124	19
65°	10	11	16	35	66	10
75°	5	6	8	9	12	5
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	332.4	332.4	332.4	332.4	332.4
2.5°	329.7	332.4	330.5	330.5	330.8
5°	321.4	325.7	326.1	328.1	330.8
7.5°	309.9	315.1	318.2	324.1	328.5
10°	296.5	302.5	308.4	318.2	324.5
12.5°	281.6	288.7	297.3	310.7	319.8
15°	265.4	273.3	284.7	302.1	313.5
17.5°	248.4	256.7	270.9	291.8	305.6
20°	230.3	239.4	256.3	280.0	296.9
22.5°	211.8	222.0	240.5	267.4	287.5
25°	193.6	203.5	224.0	254.3	277.2
27.5°	174.7	184.9	207.4	240.9	266.2
30°	155.4	166.4	190.1	227.1	254.7
32.5°	136.0	147.5	173.1	212.9	243.3
35°	115.9	128.6	156.6	198.3	231.1
37.5°	97.0	110.4	139.6	183.4	218.1
40°	77.7	91.5	123.0	168.8	205.1
42.5°	58.8	73.0	106.1	153.8	192.0
45°	42.2	55.2	89.1	139.2	177.4
47.5°	32.3	39.8	73.3	124.2	164.4
50°	28.4	30.8	58.4	109.6	149.8
52.5°	24.8	26.4	43.4	95.4	137.2
55°	21.3	22.5	31.5	82.0	124.2
57.5°	18.1	19.3	24.1	69.8	110.8
60°	15.0	16.2	20.1	57.6	96.6
62.5°	12.6	13.0	18.1	46.1	80.8
65°	9.9	10.6	16.2	34.7	65.5
67.5°	8.3	8.7	14.2	24.8	50.5
70°	6.7	7.1	12.2	17.4	35.9
72.5°	5.9	5.9	10.3	12.6	22.9
75°	4.7	5.5	8.3	9.1	11.8
77.5°	3.9	5.5	7.1	6.7	6.3
80°	3.2	5.1	5.5	5.5	5.1
82.5°	2.8	4.3	4.7	4.3	3.9
85°	2.0	3.5	3.5	3.5	2.8
87.5°	1.6	3.2	2.8	2.8	2.0
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	2.66	4.01	3.02	4.32	4.63	12.37	13.72	12.73	14.03	14.35
	3H	3.50	4.70	3.88	5.03	5.39	13.28	14.48	13.66	14.81	15.17
	4H	3.86	4.97	4.26	5.32	5.71	13.38	14.50	13.78	14.85	15.23
	6H	4.23	5.25	4.64	5.62	6.02	13.36	14.39	13.78	14.76	15.15
	8H	4.41	5.39	4.84	5.78	6.18	13.35	14.32	13.78	14.72	15.12
	12H	4.58	5.51	5.01	5.89	6.32	13.34	14.27	13.77	14.65	15.08
4H	2H	3.49	4.61	3.89	4.96	5.34	12.22	13.34	12.62	13.69	14.07
	3H	4.55	5.46	4.96	5.87	6.27	13.21	14.12	13.62	14.53	14.93
	4H	5.00	5.82	5.44	6.24	6.68	13.34	14.16	13.77	14.57	15.02
	6H	5.56	6.26	6.02	6.71	7.17	13.37	14.08	13.83	14.52	14.99
	8H	5.82	6.48	6.29	6.93	7.40	13.37	14.03	13.84	14.48	14.95
	12H	6.06	6.65	6.55	7.13	7.60	13.38	13.96	13.86	14.44	14.92
8H	4H	5.56	6.22	6.03	6.66	7.14	13.26	13.92	13.73	14.37	14.84
	6H	6.33	6.87	6.83	7.37	7.85	13.32	13.86	13.82	14.36	14.84
	8H	6.75	7.23	7.27	7.75	8.24	13.35	13.83	13.87	14.35	14.84
	12H	7.16	7.59	7.68	8.09	8.66	13.40	13.83	13.92	14.32	14.89
12H	4H	5.62	6.20	6.10	6.68	7.16	13.23	13.81	13.71	14.29	14.77
	6H	6.47	6.96	6.99	7.47	7.96	13.29	13.77	13.81	14.29	14.78
	8H	7.00	7.43	7.51	7.92	8.49	13.35	13.78	13.87	14.27	14.84