

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: P1062068

Luminaire Tested: S125RDR-H375D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062068
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-H375D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

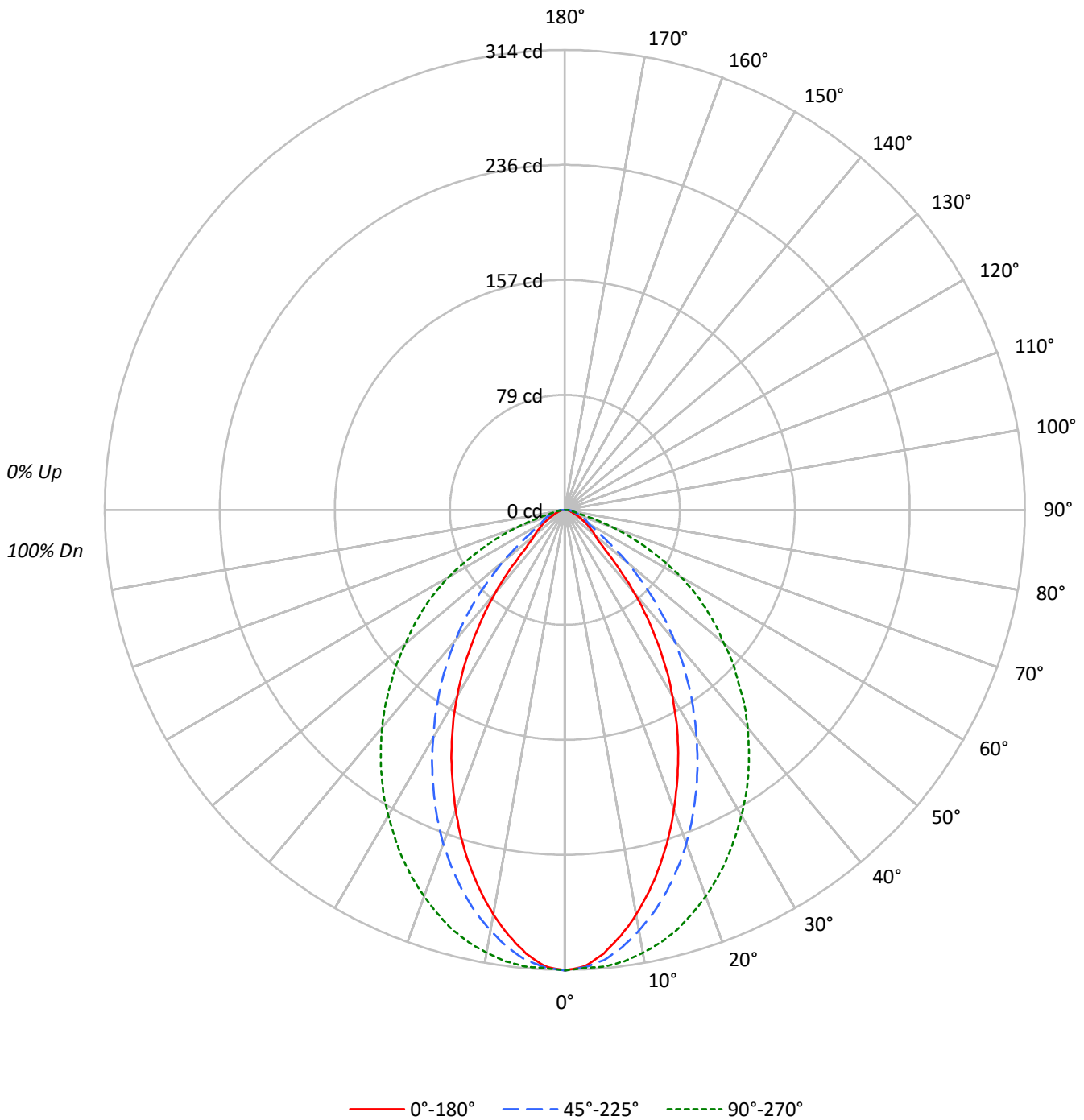
Lumens per Lamp: N/A
Luminaire Lumens: 454.1 lumens
Efficiency: N/A
Efficacy: 38.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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				100
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79				79
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	63				63
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56				56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2165	2165	2165
5°	2101	2132	2163
10°	1961	2039	2146
15°	1790	1920	2114
20°	1597	1777	2058
25°	1392	1610	1993
30°	1169	1429	1916
35°	922	1245	1837
40°	661	1046	1744
45°	389	821	1635
50°	288	591	1519
55°	241	358	1410
60°	196	262	1259
65°	152	249	1008
70°	127	234	682
75°	120	207	298
80°	119	206	190
85°	150	269	205

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1635 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.0	6.4
10°-20°	76.1	16.8
20°-30°	99.5	21.9
30°-40°	96.9	21.3
40°-50°	72.4	15.9
50°-60°	44.9	9.9
60°-70°	23.6	5.2
70°-80°	8.6	1.9
80°-90°	3.3	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°	204.6	45.1
0°-40°	301.4	66.4
0°-60°	418.7	92.2
0°-90°	454.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	454.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	314	314	314	314	314	
5°	304	308	308	310	313	28
15°	251	258	269	286	297	70
25°	183	192	212	241	262	84
35°	110	122	148	188	219	68
45°	40	52	84	132	168	34
55°	20	21	30	78	118	18
65°	9	10	15	33	62	10
75°	4	5	8	9	11	5
85°	2	3	3	3	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	314.5	314.5	314.5	314.5	314.5
2.5°	311.9	314.5	312.6	312.6	313.0
5°	304.0	308.2	308.5	310.4	313.0
7.5°	293.2	298.1	301.1	306.7	310.8
10°	280.5	286.1	291.7	301.1	307.0
12.5°	266.4	273.1	281.3	294.0	302.6
15°	251.1	258.5	269.4	285.8	296.6
17.5°	235.0	242.9	256.3	276.1	289.1
20°	217.9	226.5	242.5	264.9	280.9
22.5°	200.3	210.0	227.6	252.9	272.0
25°	183.2	192.5	211.9	240.6	262.3
27.5°	165.3	175.0	196.2	227.9	251.8
30°	147.0	157.4	179.8	214.9	241.0
32.5°	128.7	139.5	163.8	201.5	230.2
35°	109.7	121.6	148.1	187.7	218.6
37.5°	91.8	104.5	132.1	173.5	206.3
40°	73.5	86.6	116.4	159.7	194.0
42.5°	55.6	69.0	100.4	145.5	181.7
45°	39.9	52.2	84.3	131.7	167.9
47.5°	30.6	37.7	69.4	117.5	155.6
50°	26.9	29.1	55.2	103.7	141.8
52.5°	23.5	25.0	41.0	90.3	129.8
55°	20.1	21.3	29.8	77.6	117.5
57.5°	17.2	18.3	22.8	66.0	104.8
60°	14.2	15.3	19.0	54.5	91.4
62.5°	11.9	12.3	17.2	43.6	76.5
65°	9.3	10.1	15.3	32.8	61.9
67.5°	7.8	8.2	13.4	23.5	47.8
70°	6.3	6.7	11.6	16.4	33.9
72.5°	5.6	5.6	9.7	11.9	21.6
75°	4.5	5.2	7.8	8.6	11.2
77.5°	3.7	5.2	6.7	6.3	6.0
80°	3.0	4.8	5.2	5.2	4.8
82.5°	2.6	4.1	4.5	4.1	3.7
85°	1.9	3.4	3.4	3.4	2.6
87.5°	1.5	3.0	2.6	2.6	1.9
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	2.48	3.83	2.84	4.14	4.46	12.17	13.52	12.54	13.84	14.15
	3H	3.31	4.51	3.69	4.84	5.20	13.09	14.28	13.46	14.61	14.98
	4H	3.67	4.79	4.07	5.14	5.52	13.18	14.30	13.59	14.65	15.03
	6H	4.04	5.07	4.46	5.44	5.83	13.17	14.20	13.58	14.57	14.96
	8H	4.22	5.19	4.65	5.58	5.99	13.16	14.13	13.59	14.52	14.92
	12H	4.39	5.32	4.82	5.70	6.13	13.14	14.07	13.57	14.46	14.89
4H	2H	3.31	4.42	3.71	4.77	5.16	12.02	13.14	12.43	13.49	13.87
	3H	4.36	5.27	4.77	5.68	6.08	13.01	13.93	13.43	14.33	14.73
	4H	4.81	5.63	5.25	6.05	6.49	13.14	13.96	13.58	14.38	14.82
	6H	5.36	6.07	5.83	6.52	6.98	13.17	13.88	13.64	14.33	14.79
	8H	5.62	6.28	6.09	6.73	7.20	13.17	13.83	13.64	14.28	14.75
	12H	5.87	6.45	6.36	6.94	7.41	13.18	13.77	13.67	14.25	14.72
8H	4H	5.37	6.02	5.83	6.47	6.94	13.07	13.73	13.53	14.17	14.64
	6H	6.14	6.67	6.64	7.17	7.65	13.13	13.66	13.63	14.16	14.64
	8H	6.55	7.04	7.07	7.55	8.04	13.15	13.64	13.67	14.15	14.64
	12H	6.98	7.41	7.49	7.90	8.47	13.21	13.64	13.72	14.13	14.70
12H	4H	5.43	6.01	5.91	6.49	6.97	13.03	13.62	13.52	14.10	14.57
	6H	6.28	6.76	6.80	7.28	7.77	13.09	13.58	13.61	14.09	14.58
	8H	6.81	7.24	7.32	7.73	8.30	13.16	13.58	13.67	14.08	14.65