

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: P1062065

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062065
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H375D940-X4F0-XX-UDD-BVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

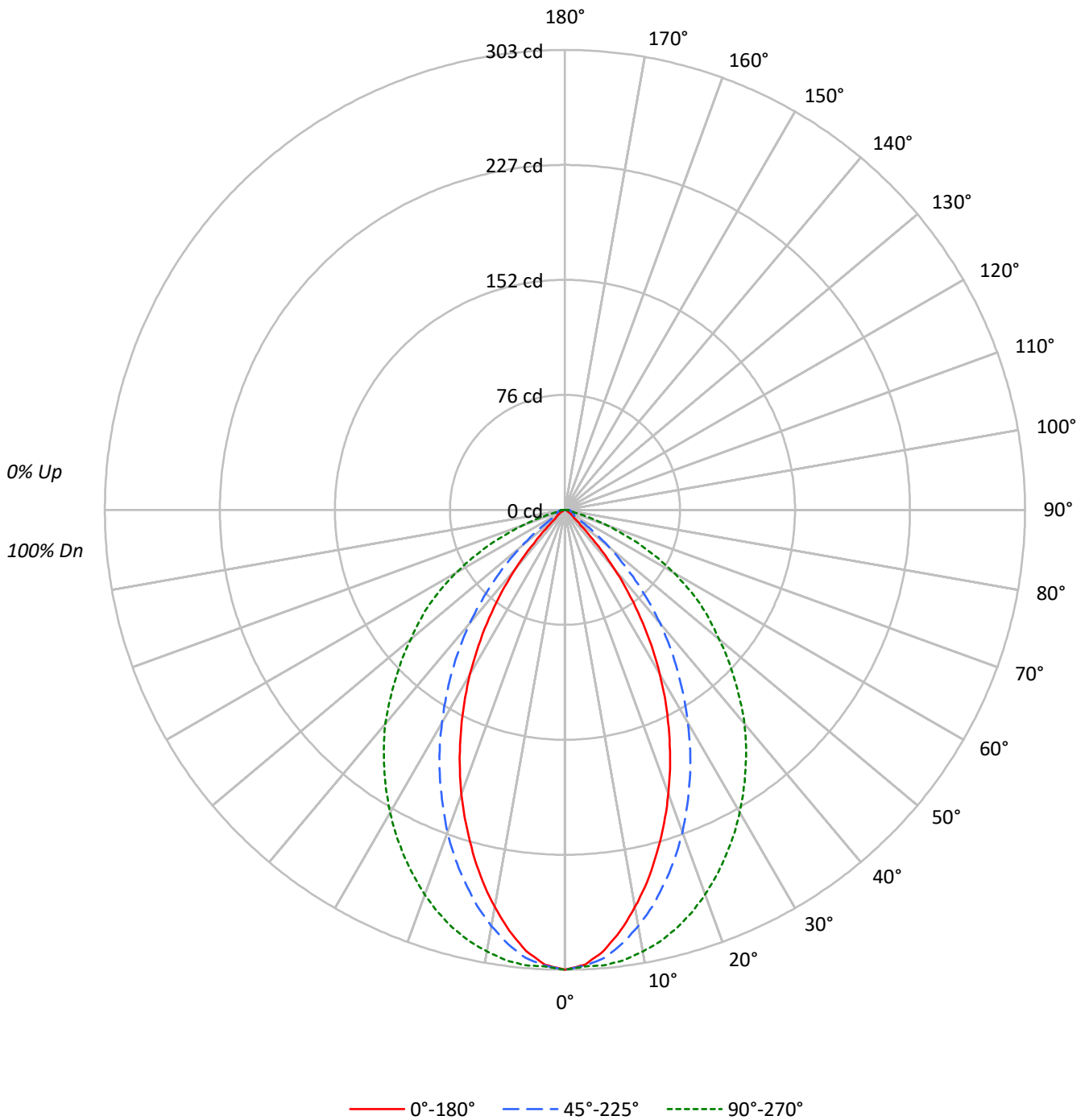
Lumens per Lamp: N/A
Luminaire Lumens: 389.7 lumens
Efficiency: N/A
Efficacy: 33.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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: P1062065

CATALOG NUMBER: S125RDR-H375D940-X4F0-XX-UDD-BVL-S

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90															
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81															
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72					72															
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65					65															
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59					59															
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54					54															
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49					49															
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45					45															
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42					42															
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39					39															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2086	2086	2086
5°	2017	2048	2081
10°	1858	1946	2066
15°	1668	1811	2032
20°	1460	1657	1977
25°	1233	1480	1908
30°	994	1287	1830
35°	730	1085	1744
40°	456	875	1654
45°	170	640	1537
50°	80	400	1419
55°	59	166	1312
60°	41	87	1136
65°	24	103	899
70°	22	121	572
75°	29	120	178
80°	44	147	135
85°	87	237	174

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1537 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.8	7.1
10°-20°	71.9	18.5
20°-30°	91.6	23.5
30°-40°	85.3	21.9
40°-50°	58.4	15.0
50°-60°	32.2	8.3
60°-70°	15.2	3.9
70°-80°	4.8	1.2
80°-90°	2.5	0.6
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°	191.3	49.1
0°-40°	276.6	71.0
0°-60°	367.2	94.2
0°-90°	389.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	389.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	303	303	303	303	303	
5°	292	296	296	298	301	27
15°	234	241	254	273	285	65
25°	162	172	195	226	251	74
35°	87	99	129	172	208	54
45°	18	30	66	116	158	17
55°	5	6	14	65	109	4
65°	2	2	6	24	55	2
75°	1	2	4	5	7	1
85°	1	3	3	3	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	303.0	303.0	303.0	303.0	303.0
2.5°	300.0	303.0	300.7	300.7	301.1
5°	291.8	295.5	296.3	298.5	301.1
7.5°	279.8	284.7	288.4	294.8	299.2
10°	265.7	271.6	278.4	288.8	295.5
12.5°	250.7	257.1	267.2	281.7	291.0
15°	234.0	241.4	254.1	273.1	285.1
17.5°	216.8	225.0	240.7	263.1	278.0
20°	199.2	207.8	226.1	251.1	269.8
22.5°	181.0	190.3	210.4	238.8	260.8
25°	162.3	172.4	194.8	226.1	251.1
27.5°	143.7	154.1	178.7	213.1	241.0
30°	125.0	135.8	161.9	199.6	230.2
32.5°	106.0	117.9	145.5	186.2	219.0
35°	86.9	99.3	129.1	171.6	207.5
37.5°	68.3	81.0	113.1	157.8	195.9
40°	50.7	63.4	97.4	144.0	184.0
42.5°	32.8	46.3	81.0	129.8	170.9
45°	17.5	29.5	65.7	116.4	157.8
47.5°	9.3	15.7	51.1	103.0	145.5
50°	7.5	8.6	37.3	89.6	132.5
52.5°	6.0	6.7	23.9	75.7	120.9
55°	4.9	5.6	13.8	64.9	109.3
57.5°	3.7	4.5	7.8	54.1	95.9
60°	3.0	3.4	6.3	43.3	82.5
62.5°	1.9	2.6	6.3	33.6	69.0
65°	1.5	1.9	6.3	23.9	55.2
67.5°	1.5	1.5	6.3	15.7	41.4
70°	1.1	1.1	6.0	10.1	28.4
72.5°	1.1	1.1	5.2	6.7	16.4
75°	1.1	1.9	4.5	4.9	6.7
77.5°	1.1	3.0	4.1	4.1	3.7
80°	1.1	3.0	3.7	3.4	3.4
82.5°	1.1	3.0	3.0	3.0	2.6
85°	1.1	2.6	3.0	2.6	2.2
87.5°	1.1	2.6	2.6	2.6	1.5
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	0.00	0.00	0.00	0.00	0.00	11.60	12.89	11.96	13.20	13.51
	3H	0.00	0.00	0.00	0.00	0.00	12.39	13.53	12.77	13.86	14.22
	4H	0.00	0.00	0.00	0.00	0.00	12.41	13.47	12.82	13.82	14.21
	6H	0.00	0.00	0.00	0.00	0.00	12.37	13.34	12.79	13.71	14.11
	8H	0.00	0.00	0.00	0.00	0.00	12.35	13.27	12.78	13.66	14.06
	12H	0.00	0.00	0.00	0.00	0.00	12.33	13.21	12.76	13.59	14.02
4H	2H	0.00	0.00	0.00	0.00	0.00	11.38	12.44	11.79	12.79	13.18
	3H	0.00	0.00	0.00	0.00	0.00	12.21	13.07	12.62	13.48	13.88
	4H	0.00	0.00	0.00	0.00	0.00	12.25	13.02	12.68	13.44	13.88
	6H	0.00	0.00	0.00	0.00	0.00	12.23	12.90	12.70	13.35	13.81
	8H	0.00	0.00	0.00	0.15	0.62	12.22	12.84	12.69	13.29	13.76
	12H	0.00	0.36	0.30	0.84	1.32	12.22	12.77	12.71	13.25	13.72
8H	4H	0.00	0.00	0.00	0.00	0.43	12.13	12.75	12.60	13.20	13.67
	6H	0.64	1.14	1.14	1.64	2.12	12.13	12.64	12.64	13.14	13.62
	8H	1.59	2.05	2.12	2.56	3.05	12.14	12.60	12.66	13.11	13.60
	12H	2.52	2.92	3.03	3.41	3.98	12.19	12.59	12.70	13.08	13.65
12H	4H	0.00	0.00	0.00	0.23	0.70	12.09	12.64	12.58	13.12	13.60
	6H	1.10	1.55	1.62	2.07	2.56	12.09	12.54	12.61	13.06	13.55
	8H	2.23	2.63	2.75	3.13	3.70	12.13	12.53	12.65	13.03	13.60