

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: P1062069

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062069
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-H375D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

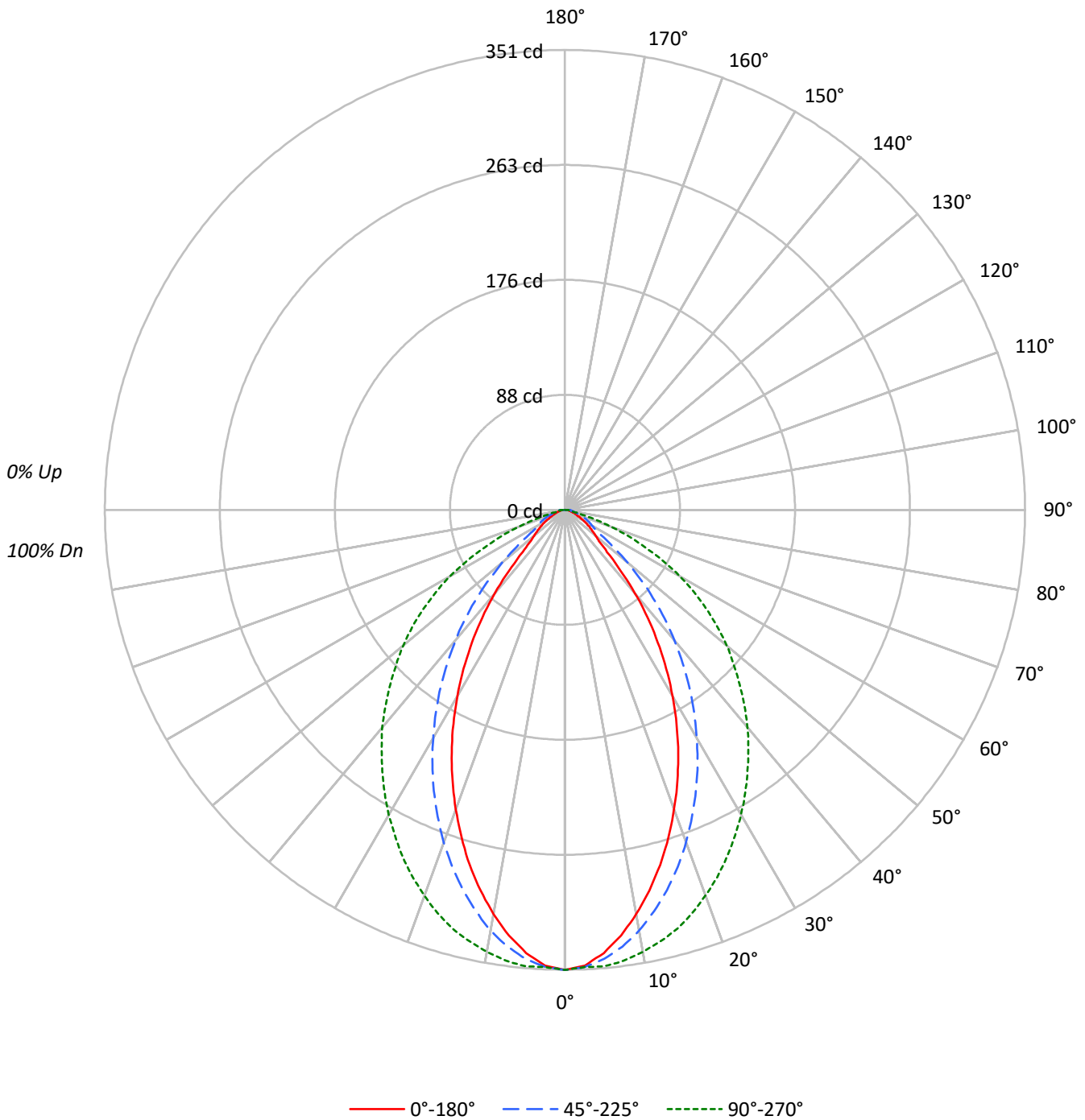
Lumens per Lamp: N/A
Luminaire Lumens: 508.6 lumens
Efficiency: N/A
Efficacy: 43.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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: P1062069

CATALOG NUMBER: S125RDR-H375D940-X4F0-XX-UDD-SVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1062069

CATALOG NUMBER: S125RDR-H375D940-X4F0-XX-UDD-SVL-W

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	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	78	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°	2417	2417	2417
5°	2346	2378	2416
10°	2191	2280	2395
15°	2000	2141	2359
20°	1783	1979	2296
25°	1554	1797	2222
30°	1305	1599	2136
35°	1038	1389	2042
40°	748	1167	1949
45°	443	926	1834
50°	328	660	1727
55°	277	408	1581
60°	226	329	1392
65°	176	305	1100
70°	151	264	737
75°	138	229	298
80°	147	238	206
85°	174	355	237

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1834 cd/sqm



TEST NUMBER: P1062069

CATALOG NUMBER: S125RDR-H375D940-X4F0-XX-UDD-SVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.4	6.4
10°-20°	85.0	16.7
20°-30°	111.1	21.8
30°-40°	108.2	21.3
40°-50°	81.2	16.0
50°-60°	50.9	10.0
60°-70°	26.5	5.2
70°-80°	9.6	1.9
80°-90°	3.8	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°	228.4	44.9
0°-40°	336.7	66.2
0°-60°	468.7	92.2
0°-90°	508.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	508.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	351	351	351	351	351	
5°	340	344	344	347	350	32
15°	281	289	300	319	331	78
25°	204	216	237	269	292	93
35°	124	137	165	209	243	77
45°	46	59	95	147	188	38
55°	23	24	34	89	132	21
65°	11	12	19	36	68	11
75°	5	7	9	9	11	6
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



TEST NUMBER: P1062069

CATALOG NUMBER: S125RDR-H375D940-X4F0-XX-UDD-SVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	351.1	351.1	351.1	351.1	351.1
2.5°	348.1	351.5	349.2	349.2	349.2
5°	339.5	344.0	344.0	346.6	349.6
7.5°	327.6	332.8	336.2	342.5	347.0
10°	313.4	319.8	326.1	336.6	342.5
12.5°	297.4	304.8	313.8	328.4	337.3
15°	280.6	288.8	300.4	319.0	331.0
17.5°	262.3	272.0	285.8	308.2	322.8
20°	243.3	253.0	270.1	295.5	313.4
22.5°	224.2	234.7	253.4	282.1	303.4
25°	204.5	215.7	236.6	268.7	292.5
27.5°	184.3	195.9	219.0	254.8	280.6
30°	164.2	176.1	201.1	239.9	268.7
32.5°	144.0	156.7	183.2	224.6	256.0
35°	123.5	136.6	165.3	209.3	242.9
37.5°	103.7	116.8	147.4	193.7	229.8
40°	83.2	97.4	129.8	178.0	216.8
42.5°	63.1	77.6	112.3	162.3	202.6
45°	45.5	59.0	95.1	147.0	188.4
47.5°	35.1	42.5	77.6	131.3	174.6
50°	30.6	32.8	61.6	116.8	161.2
52.5°	26.5	28.0	46.3	103.4	146.6
55°	23.1	24.3	34.0	88.8	131.7
57.5°	19.4	20.9	26.9	74.6	116.4
60°	16.4	17.2	23.9	61.6	101.1
62.5°	13.4	14.2	21.3	48.5	84.0
65°	10.8	11.6	18.7	35.8	67.5
67.5°	9.0	9.3	15.7	25.4	51.9
70°	7.5	7.8	13.1	17.5	36.6
72.5°	6.3	7.5	10.4	12.7	23.1
75°	5.2	7.1	8.6	9.0	11.2
77.5°	4.5	6.7	7.1	7.1	6.3
80°	3.7	5.6	6.0	5.6	5.2
82.5°	3.0	4.5	4.9	4.9	4.1
85°	2.2	3.7	4.5	4.1	3.0
87.5°	1.5	3.4	3.7	3.4	2.2
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1062069
 CATALOG NUMBER: S125RDR-H375D940-X4F0-XX-UDD-SVL-W

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	2.99	4.34	3.35	4.65	4.97	12.60	13.95	12.96	14.26	14.57
	3H	3.84	5.05	4.22	5.37	5.74	13.44	14.64	13.82	14.97	15.33
	4H	4.27	5.39	4.67	5.74	6.12	13.51	14.63	13.92	14.98	15.37
	6H	4.69	5.72	5.11	6.09	6.49	13.49	14.52	13.91	14.89	15.29
	8H	4.87	5.85	5.30	6.24	6.64	13.48	14.46	13.91	14.85	15.25
	12H	5.03	5.97	5.46	6.35	6.78	13.47	14.40	13.90	14.79	15.22
4H	2H	3.95	5.07	4.36	5.42	5.81	12.46	13.58	12.86	13.93	14.31
	3H	5.00	5.92	5.42	6.32	6.73	13.37	14.29	13.78	14.69	15.09
	4H	5.57	6.38	6.00	6.80	7.25	13.47	14.29	13.91	14.71	15.15
	6H	6.16	6.87	6.63	7.32	7.78	13.50	14.21	13.96	14.65	15.12
	8H	6.40	7.06	6.87	7.51	7.98	13.50	14.16	13.97	14.61	15.08
	12H	6.63	7.21	7.11	7.69	8.17	13.51	14.10	14.00	14.58	15.06
8H	4H	6.04	6.70	6.51	7.14	7.62	13.40	14.06	13.87	14.51	14.98
	6H	6.85	7.39	7.35	7.89	8.37	13.45	13.99	13.95	14.49	14.97
	8H	7.23	7.72	7.75	8.23	8.72	13.49	13.97	14.01	14.49	14.98
	12H	7.62	8.05	8.13	8.54	9.11	13.55	13.98	14.06	14.47	15.04
12H	4H	6.09	6.67	6.57	7.16	7.63	13.36	13.95	13.85	14.43	14.91
	6H	6.97	7.46	7.50	7.98	8.47	13.42	13.91	13.94	14.42	14.91
	8H	7.47	7.90	7.98	8.39	8.96	13.49	13.92	14.01	14.42	14.99