

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: P1062071

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062071
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H375D940-X4F0-XX-UDD-WVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

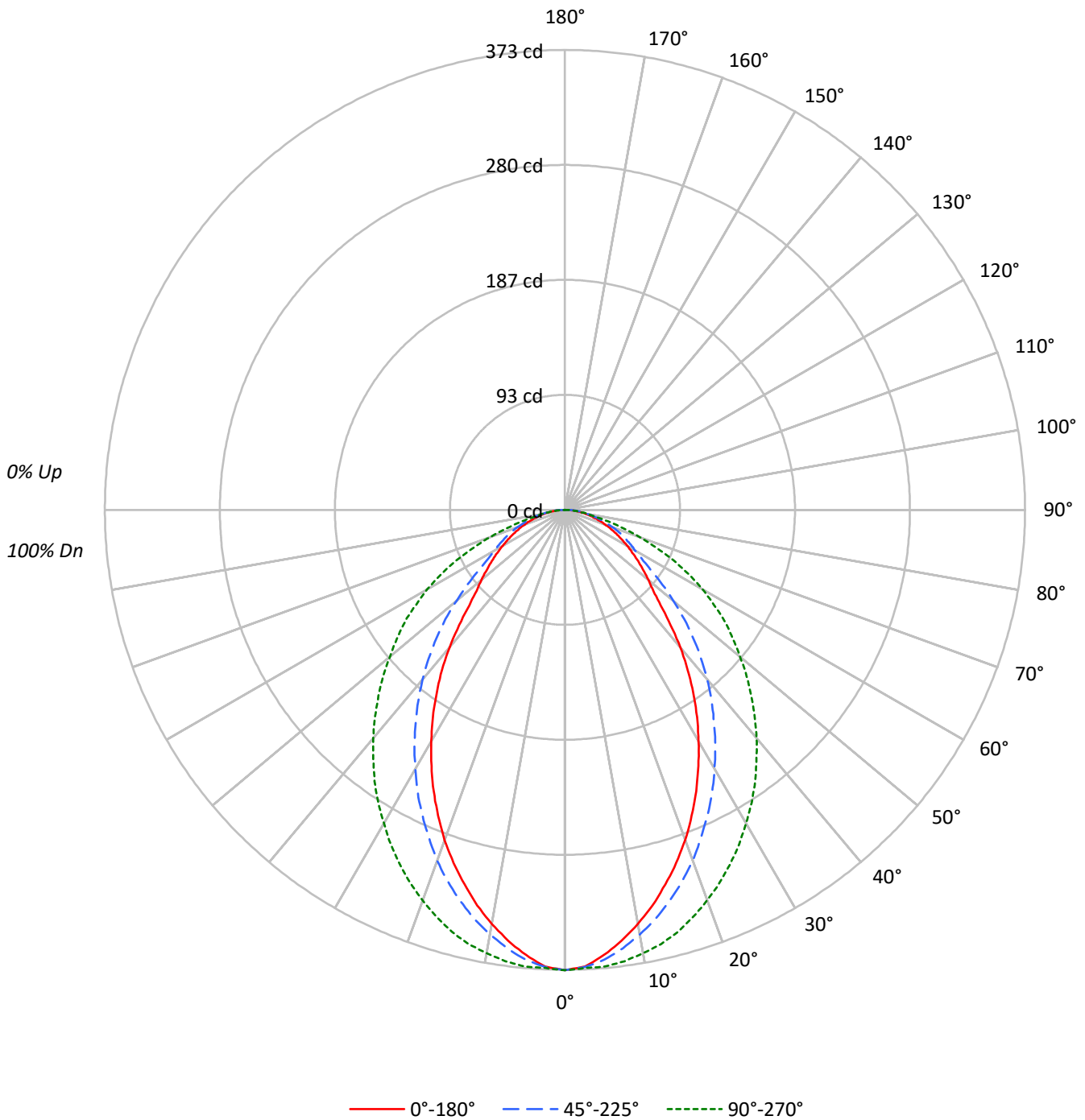
Lumens per Lamp: N/A
Luminaire Lumens: 699.9 lumens
Efficiency: N/A
Efficacy: 59.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86				86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74				74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64				64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56				56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				50
6	74	62	54	48	72	61	53	48	59	52	47	58	52	47	56	51	46	44				44
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				40
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36				36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33				33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30				30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2571	2571	2571
5°	2505	2532	2570
10°	2383	2444	2553
15°	2241	2339	2525
20°	2088	2219	2471
25°	1913	2077	2408
30°	1723	1927	2333
35°	1524	1771	2260
40°	1308	1612	2172
45°	1068	1434	2081
50°	947	1231	1986
55°	869	1020	1903
60°	801	903	1772
65°	748	868	1580
70°	699	825	1292
75°	644	774	952
80°	607	726	694
85°	561	711	592

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2081 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.5	4.9
10°-20°	93.1	13.3
20°-30°	127.9	18.3
30°-40°	135.6	19.4
40°-50°	118.3	16.9
50°-60°	89.9	12.8
60°-70°	60.2	8.6
70°-80°	31.0	4.4
80°-90°	9.3	1.3
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°	255.5	36.5
0°-40°	391.1	55.9
0°-60°	599.3	85.6
0°-90°	699.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	699.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	373	373	373	373	373	
5°	362	366	366	369	372	34
15°	314	320	328	343	354	88
25°	252	260	273	296	317	115
35°	181	192	211	241	269	113
45°	110	120	147	182	214	87
55°	72	75	85	125	158	65
65°	46	47	53	71	97	46
75°	24	26	29	31	36	26
85°	7	9	9	8	8	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	373.4	373.4	373.4	373.4	373.4
2.5°	370.7	373.4	371.1	371.1	371.9
5°	362.5	366.3	366.3	368.9	371.9
7.5°	352.5	356.6	358.8	364.8	369.2
10°	340.9	345.4	349.5	358.4	365.1
12.5°	328.6	333.4	339.8	351.3	360.7
15°	314.4	320.4	328.2	342.8	354.3
17.5°	300.2	306.2	315.9	333.1	346.1
20°	285.0	291.3	302.9	321.5	337.2
22.5°	268.5	275.6	287.9	309.2	327.5
25°	251.8	259.6	273.4	296.1	317.0
27.5°	234.2	243.6	258.5	282.7	305.8
30°	216.7	226.0	242.4	268.9	293.5
32.5°	199.2	209.2	227.1	255.1	281.6
35°	181.3	191.7	210.7	240.6	268.9
37.5°	163.7	174.2	195.4	226.4	255.1
40°	145.5	156.3	179.4	211.9	241.7
42.5°	126.8	138.4	163.4	196.9	227.9
45°	109.7	120.5	147.3	182.4	213.7
47.5°	97.0	104.1	131.3	167.5	199.9
50°	88.4	92.1	114.9	152.9	185.4
52.5°	79.8	82.8	99.6	138.0	171.6
55°	72.4	74.6	85.0	124.9	158.5
57.5°	64.9	67.1	73.8	111.9	143.2
60°	58.2	60.0	65.6	98.1	128.7
62.5°	51.8	53.3	59.3	85.0	113.0
65°	45.9	47.0	53.3	71.2	97.0
67.5°	39.9	41.0	47.4	58.2	79.8
70°	34.7	35.1	41.0	47.4	64.2
72.5°	29.5	29.8	34.7	38.4	49.2
75°	24.2	25.7	29.1	31.0	35.8
77.5°	19.8	21.6	23.5	24.2	24.2
80°	15.3	17.5	18.3	18.3	17.5
82.5°	11.2	13.1	13.4	12.7	11.9
85°	7.1	9.0	9.0	8.2	7.5
87.5°	3.4	4.8	4.8	4.5	3.4
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	9.88	11.38	10.25	11.69	12.01	13.82	15.31	14.18	15.63	15.94
	3H	11.46	12.80	11.83	13.13	13.49	15.24	16.58	15.62	16.91	17.27
	4H	12.07	13.33	12.47	13.68	14.06	15.65	16.91	16.05	17.26	17.64
	6H	12.56	13.73	12.98	14.09	14.49	15.87	17.03	16.28	17.40	17.79
	8H	12.74	13.85	13.17	14.24	14.64	15.93	17.03	16.35	17.42	17.82
	12H	12.86	13.92	13.29	14.30	14.73	15.96	17.02	16.39	17.40	17.83
4H	2H	10.62	11.88	11.02	12.23	12.61	13.94	15.20	14.34	15.55	15.93
	3H	12.40	13.45	12.81	13.85	14.25	15.55	16.60	15.96	17.00	17.40
	4H	13.14	14.08	13.57	14.49	14.93	16.08	17.02	16.51	17.43	17.87
	6H	13.77	14.59	14.23	15.03	15.49	16.42	17.24	16.88	17.68	18.14
	8H	14.00	14.77	14.46	15.21	15.68	16.52	17.28	16.98	17.73	18.20
	12H	14.18	14.86	14.66	15.34	15.81	16.59	17.27	17.07	17.75	18.22
8H	4H	13.54	14.30	14.00	14.75	15.21	16.19	16.95	16.65	17.39	17.86
	6H	14.32	14.96	14.82	15.45	15.92	16.62	17.25	17.12	17.75	18.22
	8H	14.65	15.22	15.16	15.73	16.21	16.78	17.35	17.30	17.86	18.35
	12H	14.93	15.43	15.44	15.92	16.48	16.92	17.42	17.43	17.91	18.48
12H	4H	13.58	14.26	14.06	14.74	15.21	16.19	16.87	16.67	17.35	17.82
	6H	14.41	14.97	14.92	15.48	15.97	16.64	17.21	17.15	17.72	18.21
	8H	14.80	15.30	15.31	15.80	16.36	16.85	17.35	17.36	17.84	18.41