

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: P1062012

Luminaire Tested: S125RDR-H375D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062012
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H375D835-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

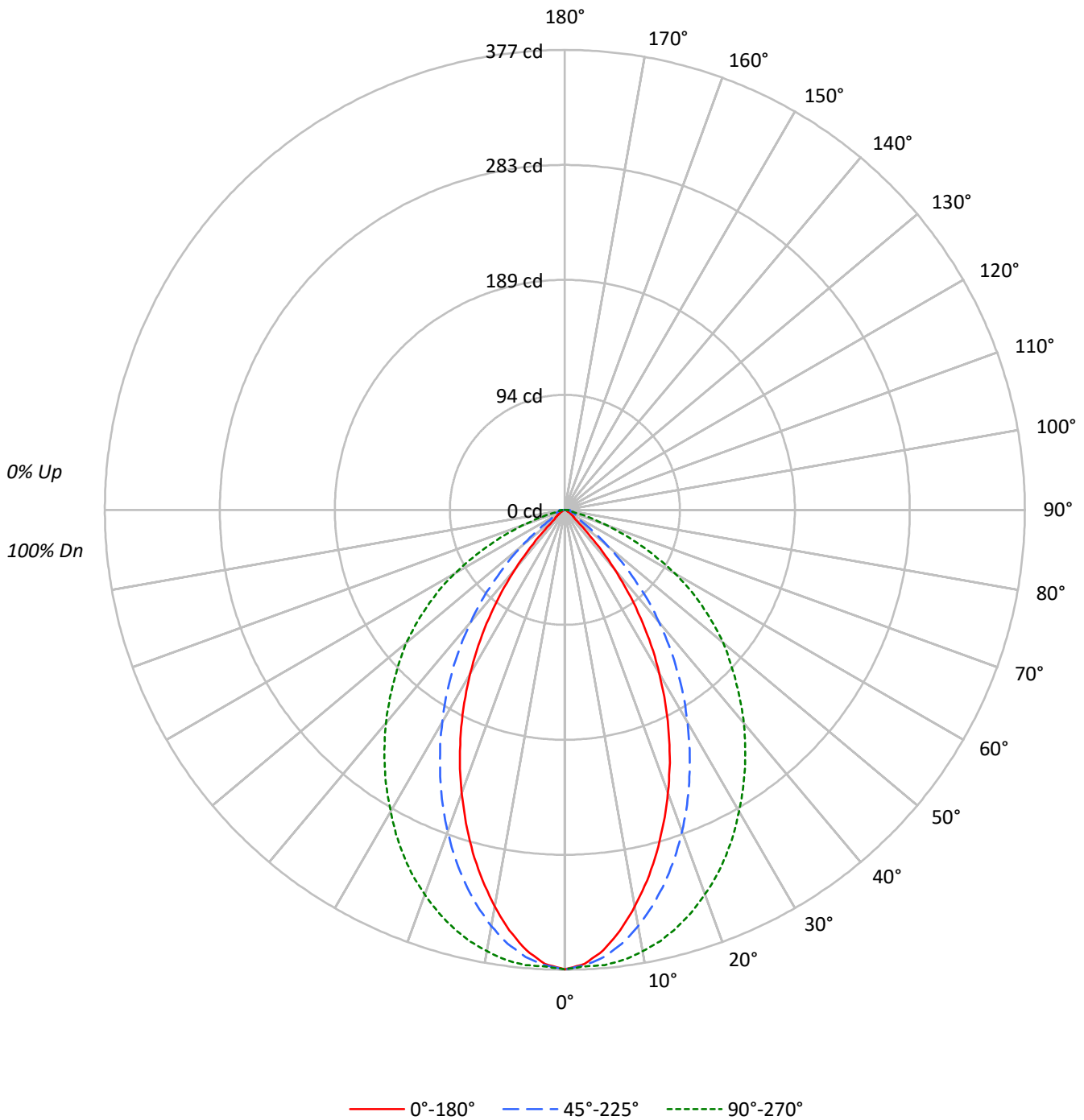
Lumens per Lamp: N/A
Luminaire Lumens: 487.3 lumens
Efficiency: N/A
Efficacy: 41.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2594	2594	2594
5°	2505	2543	2589
10°	2309	2423	2569
15°	2074	2255	2527
20°	1809	2057	2459
25°	1532	1835	2375
30°	1231	1597	2269
35°	911	1347	2164
40°	564	1076	2050
45°	220	787	1928
50°	103	493	1816
55°	76	211	1648
60°	52	150	1429
65°	34	156	1111
70°	34	143	699
75°	45	144	223
80°	67	167	151
85°	103	332	229

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1928 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.5	7.1
10°-20°	89.5	18.4
20°-30°	114.0	23.4
30°-40°	106.1	21.8
40°-50°	73.0	15.0
50°-60°	41.3	8.5
60°-70°	19.5	4.0
70°-80°	6.1	1.3
80°-90°	3.2	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°	238.0	48.8
0°-40°	344.1	70.6
0°-60°	458.5	94.1
0°-90°	487.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	487.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	377	377	377	377	377	
5°	362	367	368	371	375	34
15°	291	300	316	340	354	81
25°	202	215	242	282	313	92
35°	108	124	160	215	257	67
45°	23	36	81	146	198	21
55°	6	7	18	84	137	6
65°	2	2	10	30	68	2
75°	2	4	5	6	8	2
85°	1	3	4	4	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	376.7	376.7	376.7	376.7	376.7
2.5°	372.5	376.2	373.7	374.1	374.6
5°	362.4	367.4	367.9	371.2	374.6
7.5°	347.8	354.1	358.7	366.6	372.0
10°	330.2	337.7	346.5	359.5	367.4
12.5°	311.4	320.2	332.3	350.7	362.0
15°	290.9	300.5	316.4	340.2	354.5
17.5°	269.1	280.0	299.2	327.7	345.7
20°	246.9	258.6	280.8	313.5	335.6
22.5°	224.7	236.9	261.6	298.0	324.8
25°	201.7	214.7	241.5	282.1	312.6
27.5°	178.3	191.7	221.4	265.7	299.6
30°	154.8	169.1	200.9	249.0	285.4
32.5°	131.8	146.1	180.8	232.3	271.6
35°	108.4	123.5	160.3	215.1	257.4
37.5°	85.0	101.3	140.2	197.5	242.7
40°	62.8	78.3	119.7	180.4	228.1
42.5°	41.9	56.9	101.3	163.2	213.0
45°	22.6	36.0	80.8	146.1	198.0
47.5°	12.1	19.3	63.2	129.3	183.3
50°	9.6	10.9	46.0	113.8	169.5
52.5°	8.0	8.8	30.1	99.2	153.6
55°	6.3	7.1	17.6	84.1	137.3
57.5°	5.0	5.9	11.3	69.9	121.4
60°	3.8	4.6	10.9	56.1	103.8
62.5°	2.9	3.3	10.0	43.1	85.4
65°	2.1	2.5	9.6	30.1	68.2
67.5°	1.7	2.1	8.8	19.3	51.1
70°	1.7	1.7	7.1	12.6	34.7
72.5°	1.7	2.9	6.3	8.4	20.9
75°	1.7	3.8	5.4	5.9	8.4
77.5°	1.7	4.2	4.6	4.6	4.6
80°	1.7	3.8	4.2	4.2	3.8
82.5°	1.7	3.3	3.8	4.2	3.3
85°	1.3	3.3	4.2	3.8	2.9
87.5°	1.3	3.3	3.8	3.3	2.1
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	12.56	13.85	12.92	14.16	14.48
	3H	0.00	0.00	0.00	0.00	0.00	13.28	14.42	13.66	14.75	15.12
	4H	0.00	0.00	0.00	0.00	0.00	13.30	14.36	13.70	14.72	15.10
	6H	0.00	0.00	0.00	0.00	0.00	13.25	14.23	13.67	14.60	14.99
	8H	0.00	0.00	0.00	0.00	0.00	13.23	14.15	13.66	14.54	14.95
	12H	0.00	0.00	0.00	0.00	0.00	13.21	14.09	13.64	14.48	14.91
4H	2H	0.00	0.00	0.00	0.00	0.00	12.35	13.41	12.75	13.76	14.15
	3H	0.00	0.00	0.00	0.00	0.00	13.11	13.97	13.52	14.38	14.78
	4H	0.00	0.00	0.00	0.10	0.55	13.14	13.91	13.57	14.33	14.77
	6H	0.20	0.87	0.66	1.31	1.78	13.11	13.78	13.58	14.23	14.70
	8H	0.78	1.40	1.25	1.85	2.32	13.10	13.72	13.57	14.17	14.64
	12H	1.34	1.89	1.83	2.38	2.85	13.10	13.65	13.59	14.14	14.61
8H	4H	0.31	0.94	0.78	1.39	1.86	13.02	13.64	13.49	14.09	14.56
	6H	1.89	2.40	2.39	2.89	3.37	13.01	13.52	13.51	14.01	14.50
	8H	2.67	3.13	3.19	3.64	4.14	13.02	13.48	13.54	13.99	14.49
	12H	3.50	3.90	4.02	4.40	4.97	13.08	13.48	13.60	13.98	14.55
12H	4H	0.54	1.09	1.02	1.57	2.04	12.98	13.53	13.46	14.01	14.48
	6H	2.26	2.72	2.78	3.23	3.73	12.96	13.42	13.48	13.93	14.43
	8H	3.24	3.64	3.75	4.14	4.71	13.01	13.41	13.53	13.91	14.48