

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: P1062031

Luminaire Tested: S125RDR-H375D850-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062031
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H375D850-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

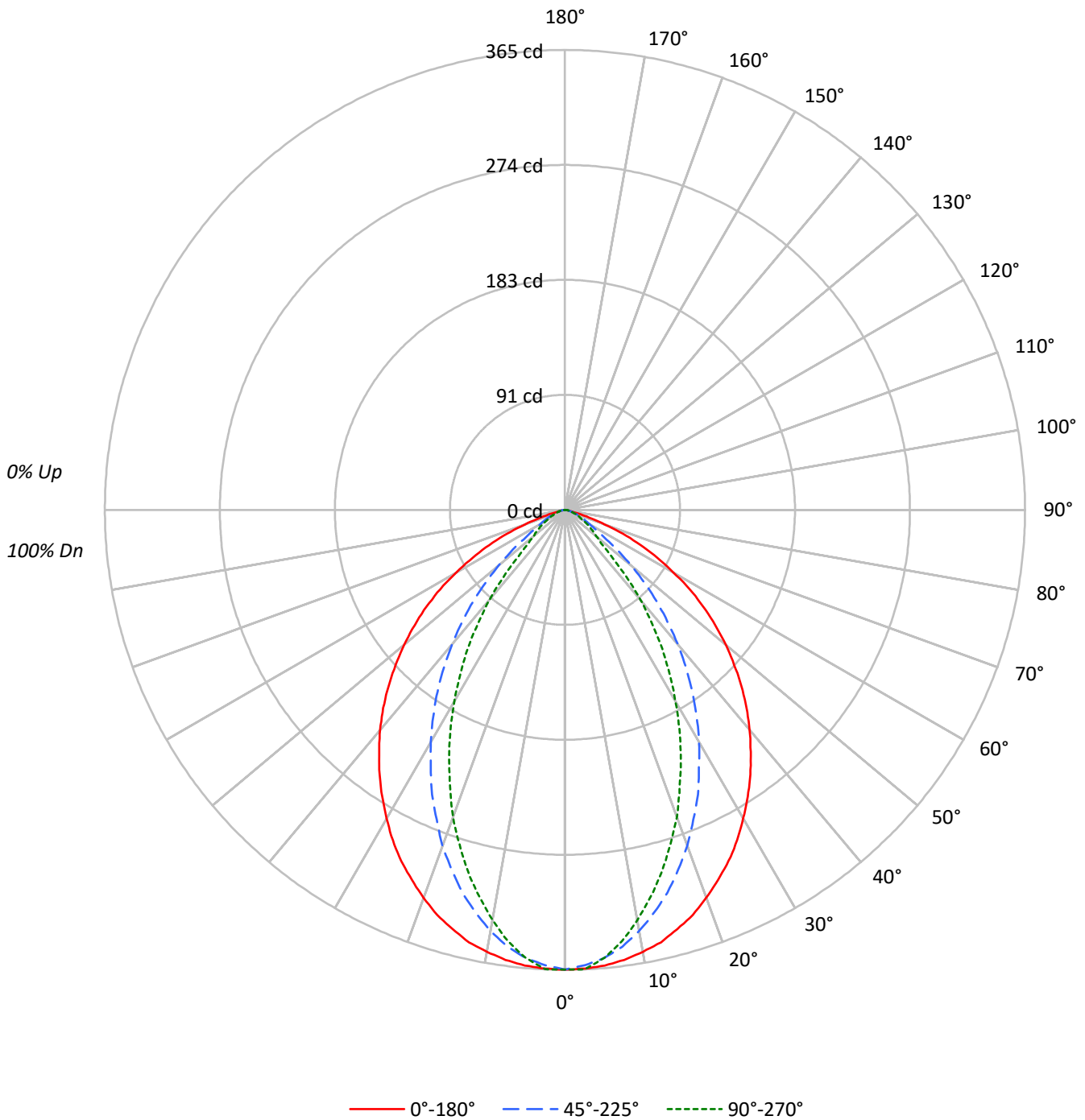
Lumens per Lamp: N/A
Luminaire Lumens: 527.7 lumens
Efficiency: N/A
Efficacy: 45.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2512	2512	2512
5°	2509	2467	2467
10°	2490	2373	2311
15°	2456	2241	2118
20°	2402	2079	1902
25°	2335	1895	1652
30°	2248	1692	1394
35°	2155	1481	1131
40°	2050	1250	838
45°	1928	1002	505
50°	1783	735	348
55°	1609	451	289
60°	1366	307	230
65°	1080	235	181
70°	680	167	149
75°	221	122	122
80°	75	91	111
85°	39	71	71

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1928 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.7	6.4
10°-20°	89.1	16.9
20°-30°	117.2	22.2
30°-40°	115.2	21.8
40°-50°	87.1	16.5
50°-60°	52.8	10.0
60°-70°	24.9	4.7
70°-80°	6.5	1.2
80°-90°	1.0	0.2
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°	240.1	45.5
0°-40°	355.3	67.3
0°-60°	495.3	93.9
0°-90°	527.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	527.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	365	365	365	365	365	
5°	363	362	357	358	357	34
15°	344	335	314	302	297	97
25°	307	284	249	226	218	141
35°	256	222	176	145	134	160
45°	198	156	103	65	52	152
55°	134	92	38	26	24	119
65°	66	34	14	12	11	65
75°	8	6	5	5	5	13
85°	0	0	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	364.9	364.9	364.9	364.9	364.9
2.5°	364.4	364.4	361.7	364.9	364.9
5°	363.0	362.1	357.0	357.5	357.0
7.5°	360.3	358.4	349.6	347.3	345.4
10°	356.1	352.4	339.4	333.8	330.6
12.5°	351.5	345.0	327.3	319.5	314.4
15°	344.5	335.2	314.4	302.3	297.2
17.5°	337.1	323.6	299.1	284.7	278.2
20°	327.8	312.0	283.8	266.1	259.6
22.5°	317.6	299.1	266.1	246.7	237.9
25°	307.4	284.2	249.4	226.3	217.5
27.5°	295.8	269.4	230.4	206.3	196.6
30°	282.8	254.5	212.8	187.8	175.3
32.5°	269.8	239.2	194.3	166.9	154.4
35°	256.4	222.1	176.2	145.1	134.5
37.5°	242.0	205.9	157.6	125.2	112.7
40°	228.1	189.6	139.1	104.8	93.2
42.5°	213.3	173.4	120.6	84.8	71.9
45°	198.0	155.8	102.9	65.4	51.9
47.5°	182.2	140.0	85.3	48.2	38.9
50°	166.5	123.3	68.6	35.7	32.5
52.5°	150.2	107.1	51.9	29.7	28.3
55°	134.0	91.8	37.6	25.5	24.1
57.5°	117.3	75.1	28.3	21.8	20.4
60°	99.2	60.3	22.3	18.1	16.7
62.5°	82.5	47.3	18.1	14.8	13.9
65°	66.3	33.8	14.4	12.1	11.1
67.5°	49.6	22.7	11.1	9.3	9.3
70°	33.8	14.8	8.3	7.4	7.4
72.5°	20.4	8.8	6.0	6.0	6.0
75°	8.3	5.6	4.6	4.6	4.6
77.5°	2.8	3.2	3.2	3.7	3.7
80°	1.9	1.9	2.3	2.8	2.8
82.5°	0.9	1.4	1.4	1.9	1.9
85°	0.5	0.5	0.9	0.9	0.9
87.5°	0.0	0.0	0.0	0.5	0.5
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	12.53	13.86	12.89	14.17	14.49	3.19	4.52	3.55	4.83	5.15
	3H	13.23	14.41	13.61	14.74	15.11	3.97	5.15	4.35	5.48	5.84
	4H	13.25	14.35	13.65	14.70	15.08	4.21	5.31	4.62	5.66	6.04
	6H	13.18	14.19	13.60	14.56	14.95	4.39	5.40	4.81	5.77	6.16
	8H	13.14	14.09	13.57	14.48	14.89	4.44	5.39	4.87	5.78	6.19
	12H	13.10	14.01	13.53	14.39	14.82	4.45	5.36	4.88	5.74	6.17
4H	2H	12.36	13.46	12.76	13.81	14.19	3.68	4.77	4.08	5.12	5.51
	3H	13.11	14.00	13.52	14.40	14.80	4.58	5.47	4.99	5.88	6.28
	4H	13.12	13.92	13.56	14.34	14.78	4.89	5.68	5.32	6.10	6.55
	6H	13.06	13.75	13.53	14.19	14.66	5.15	5.84	5.61	6.28	6.75
	8H	13.01	13.65	13.48	14.10	14.57	5.22	5.86	5.69	6.31	6.78
	12H	12.97	13.53	13.45	14.01	14.49	5.25	5.81	5.73	6.29	6.77
8H	4H	13.01	13.64	13.47	14.09	14.56	5.00	5.64	5.47	6.09	6.56
	6H	12.93	13.45	13.43	13.95	14.43	5.32	5.84	5.82	6.34	6.82
	8H	12.88	13.34	13.40	13.86	14.35	5.43	5.90	5.95	6.41	6.91
	12H	12.84	13.25	13.35	13.74	14.31	5.49	5.90	6.01	6.40	6.97
12H	4H	12.96	13.52	13.45	14.01	14.48	4.97	5.53	5.46	6.02	6.49
	6H	12.87	13.34	13.39	13.85	14.35	5.29	5.76	5.81	6.27	6.77
	8H	12.84	13.25	13.35	13.74	14.32	5.44	5.85	5.95	6.34	6.91