

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: P1062003

Luminaire Tested: S125RDR-H375D830-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062003
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-H375D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

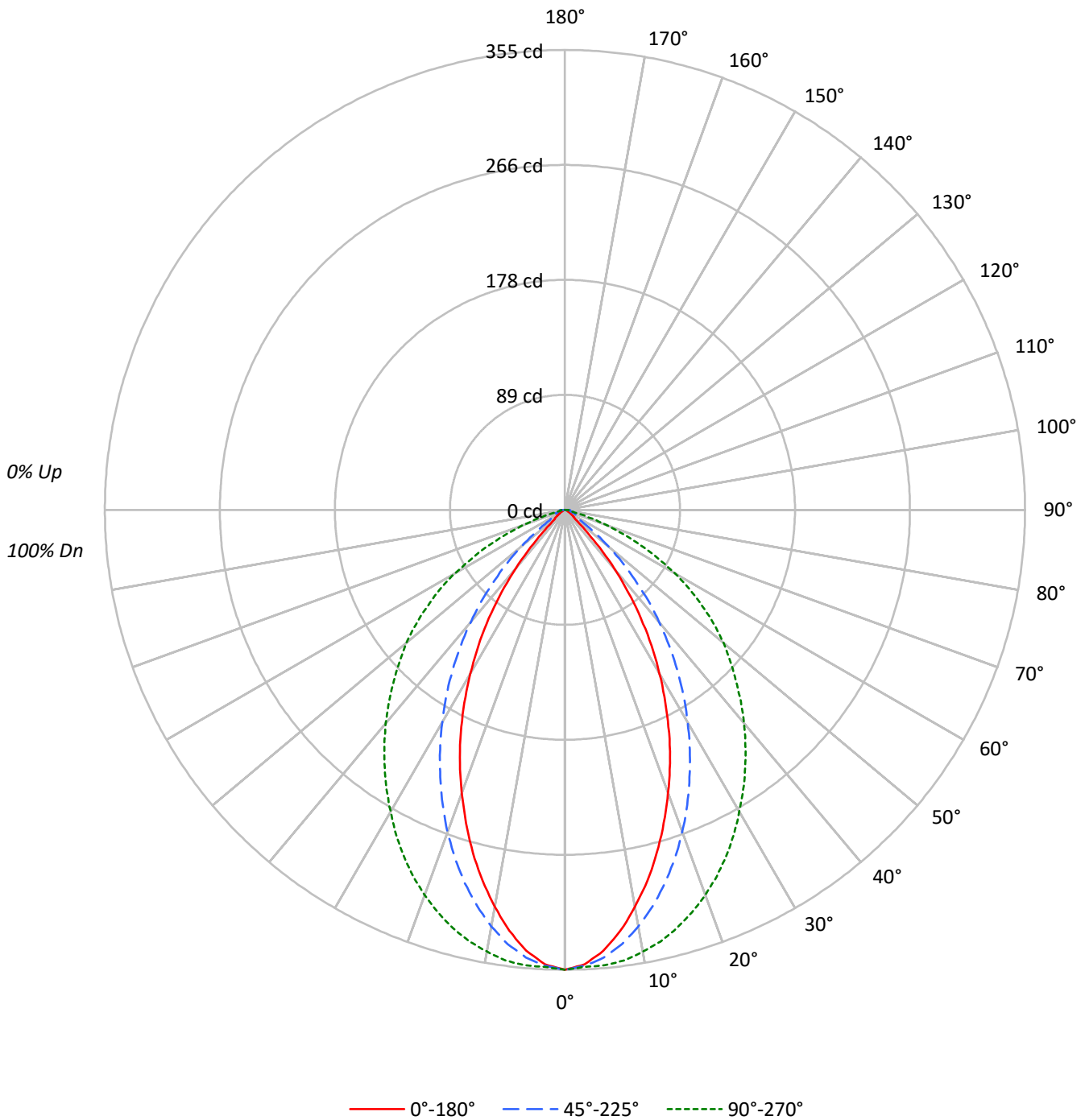
Lumens per Lamp: N/A
Luminaire Lumens: 459.4 lumens
Efficiency: N/A
Efficacy: 39.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									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	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°	2444	2444	2444
5°	2361	2396	2440
10°	2176	2283	2421
15°	1954	2126	2382
20°	1705	1939	2318
25°	1444	1729	2239
30°	1160	1505	2139
35°	859	1270	2039
40°	532	1014	1932
45°	207	741	1817
50°	97	465	1712
55°	71	199	1553
60°	50	142	1347
65°	33	148	1048
70°	32	135	658
75°	43	136	210
80°	63	155	143
85°	95	308	221

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1817 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.6	7.1
10°-20°	84.4	18.4
20°-30°	107.4	23.4
30°-40°	100.0	21.8
40°-50°	68.8	15.0
50°-60°	39.0	8.5
60°-70°	18.4	4.0
70°-80°	5.7	1.3
80°-90°	3.0	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°	224.3	48.8
0°-40°	324.4	70.6
0°-60°	432.2	94.1
0°-90°	459.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	459.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	355	355	355	355	355	
5°	342	346	347	350	353	32
15°	274	283	298	321	334	76
25°	190	202	228	266	295	87
35°	102	116	151	203	243	63
45°	21	34	76	138	187	20
55°	6	7	17	79	129	5
65°	2	2	9	28	64	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°	355.0	355.0	355.0	355.0	355.0
2.5°	351.1	354.6	352.2	352.6	353.0
5°	341.6	346.3	346.7	349.9	353.0
7.5°	327.8	333.7	338.0	345.5	350.7
10°	311.2	318.3	326.6	338.8	346.3
12.5°	293.5	301.8	313.2	330.6	341.2
15°	274.1	283.2	298.2	320.7	334.1
17.5°	253.6	263.9	282.0	308.9	325.8
20°	232.7	243.8	264.7	295.4	316.4
22.5°	211.8	223.3	246.5	280.9	306.1
25°	190.1	202.4	227.6	265.9	294.7
27.5°	168.0	180.7	208.7	250.5	282.4
30°	145.9	159.4	189.3	234.7	269.0
32.5°	124.3	137.7	170.4	218.9	256.0
35°	102.2	116.4	151.1	202.8	242.6
37.5°	80.1	95.5	132.1	186.2	228.8
40°	59.2	73.8	112.8	170.0	215.0
42.5°	39.4	53.6	95.5	153.8	200.8
45°	21.3	33.9	76.1	137.7	186.6
47.5°	11.4	18.1	59.6	121.9	172.8
50°	9.1	10.3	43.4	107.3	159.8
52.5°	7.5	8.3	28.4	93.5	144.8
55°	5.9	6.7	16.6	79.3	129.4
57.5°	4.7	5.5	10.7	65.9	114.4
60°	3.6	4.3	10.3	52.9	97.8
62.5°	2.8	3.2	9.5	40.6	80.5
65°	2.0	2.4	9.1	28.4	64.3
67.5°	1.6	2.0	8.3	18.1	48.1
70°	1.6	1.6	6.7	11.8	32.7
72.5°	1.6	2.8	5.9	7.9	19.7
75°	1.6	3.6	5.1	5.5	7.9
77.5°	1.6	3.9	4.3	4.3	4.3
80°	1.6	3.6	3.9	3.9	3.6
82.5°	1.6	3.2	3.6	3.9	3.2
85°	1.2	3.2	3.9	3.6	2.8
87.5°	1.2	3.2	3.6	3.2	2.0
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	12.35	13.64	12.72	13.96	14.27
	3H	0.00	0.00	0.00	0.00	0.00	13.07	14.21	13.45	14.54	14.91
	4H	0.00	0.00	0.00	0.00	0.00	13.09	14.16	13.50	14.51	14.89
	6H	0.00	0.00	0.00	0.00	0.00	13.04	14.02	13.46	14.39	14.78
	8H	0.00	0.00	0.00	0.00	0.00	13.02	13.94	13.45	14.33	14.74
	12H	0.00	0.00	0.00	0.00	0.00	13.00	13.89	13.44	14.27	14.70
4H	2H	0.00	0.00	0.00	0.00	0.00	12.14	13.21	12.55	13.56	13.94
	3H	0.00	0.00	0.00	0.00	0.00	12.90	13.76	13.31	14.17	14.57
	4H	0.00	0.00	0.00	0.00	0.35	12.93	13.70	13.36	14.12	14.56
	6H	0.00	0.66	0.45	1.10	1.57	12.90	13.57	13.37	14.02	14.49
	8H	0.58	1.20	1.05	1.65	2.12	12.89	13.51	13.36	13.96	14.43
	12H	1.15	1.70	1.64	2.19	2.66	12.90	13.45	13.38	13.93	14.40
8H	4H	0.10	0.72	0.57	1.17	1.64	12.81	13.43	13.28	13.88	14.35
	6H	1.67	2.18	2.17	2.68	3.16	12.80	13.31	13.30	13.80	14.28
	8H	2.48	2.94	3.01	3.46	3.95	12.81	13.27	13.33	13.78	14.27
	12H	3.34	3.74	3.85	4.24	4.81	12.87	13.27	13.39	13.77	14.34
12H	4H	0.32	0.87	0.80	1.35	1.82	12.77	13.32	13.25	13.80	14.27
	6H	2.04	2.50	2.56	3.01	3.51	12.75	13.21	13.27	13.72	14.22
	8H	3.05	3.45	3.57	3.95	4.52	12.80	13.20	13.31	13.70	14.27