

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: P1062007

Luminaire Tested: S125RDR-H375D830-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062007
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H375D830-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

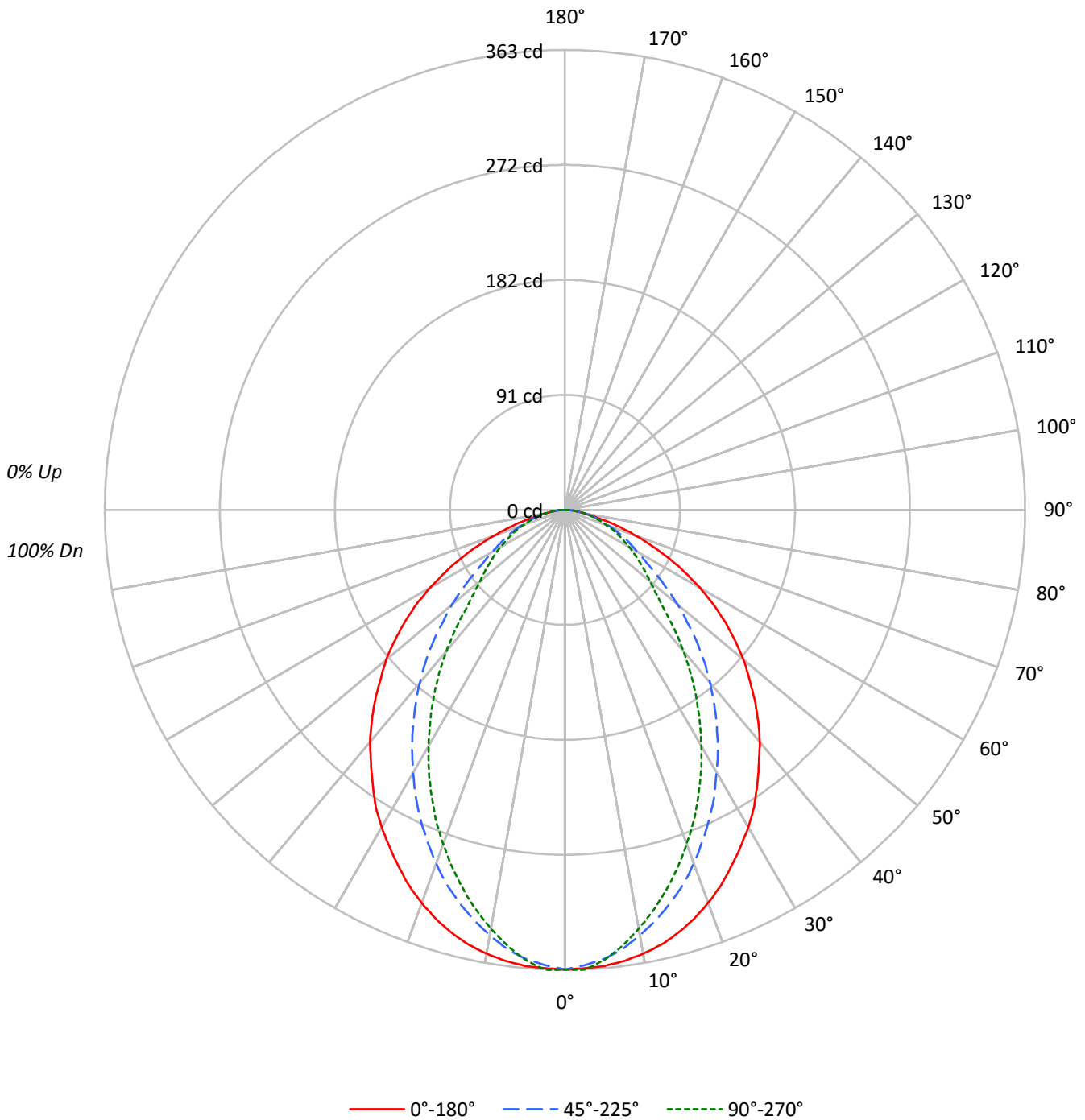
Lumens per Lamp: N/A
Luminaire Lumens: 687.5 lumens
Efficiency: N/A
Efficacy: 58.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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: P1062007

CATALOG NUMBER: S125RDR-H375D830-X4F0-XX-UDD-WVL-B

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													100															
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87													87															
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75													75															
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65													65															
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57													57															
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50													50															
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45													45															
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40													40															
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36													36															
9	61	48	41	35	60	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°	2499	2499	2499
5°	2497	2459	2465
10°	2488	2383	2347
15°	2463	2290	2210
20°	2419	2177	2056
25°	2359	2047	1892
30°	2299	1902	1711
35°	2222	1755	1517
40°	2150	1601	1307
45°	2060	1431	1070
50°	1971	1241	937
55°	1850	1036	865
60°	1688	906	808
65°	1476	828	751
70°	1198	745	699
75°	859	681	649
80°	595	611	611
85°	434	529	561

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2060 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.7	4.9
10°-20°	91.3	13.3
20°-30°	126.2	18.3
30°-40°	134.4	19.5
40°-50°	118.0	17.2
50°-60°	89.5	13.0
60°-70°	58.1	8.5
70°-80°	28.8	4.2
80°-90°	7.5	1.1
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°	251.2	36.5
0°-40°	385.5	56.1
0°-60°	593.1	86.3
0°-90°	687.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	687.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	363	363	363	363	363	
5°	361	361	356	357	357	34
15°	346	338	321	314	310	97
25°	310	294	270	256	249	143
35°	264	240	209	190	180	166
45°	212	182	147	121	110	163
55°	154	124	86	74	72	137
65°	91	67	51	47	46	90
75°	32	28	26	25	24	36
85°	6	6	7	7	7	7
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	362.9	362.9	362.9	362.9	362.9
2.5°	362.1	362.9	359.8	362.5	363.3
5°	361.3	360.6	355.8	357.0	356.6
7.5°	359.0	357.4	349.5	348.7	347.2
10°	355.8	351.9	340.9	338.1	335.7
12.5°	351.5	345.2	331.8	326.3	323.5
15°	345.6	337.7	321.2	313.7	310.1
17.5°	338.5	327.5	310.1	299.9	295.9
20°	330.2	317.2	297.1	285.3	280.6
22.5°	321.2	305.8	283.3	270.7	265.6
25°	310.5	293.6	269.5	255.7	249.0
27.5°	299.9	281.0	255.0	239.6	232.5
30°	289.2	267.6	239.2	222.6	215.2
32.5°	277.8	253.8	224.6	206.5	197.8
35°	264.4	240.0	208.8	189.9	180.5
37.5°	251.4	225.4	193.5	172.2	163.1
40°	239.2	211.6	178.1	154.9	145.4
42.5°	225.4	197.0	162.7	138.3	127.7
45°	211.6	182.1	147.0	120.6	109.9
47.5°	197.0	167.9	130.4	104.4	97.3
50°	184.0	153.3	115.9	92.2	87.5
52.5°	169.0	139.1	100.9	82.8	79.6
55°	154.1	123.7	86.3	74.5	72.1
57.5°	138.7	109.9	74.9	67.4	65.0
60°	122.6	95.8	65.8	59.9	58.7
62.5°	106.4	81.2	57.9	53.6	52.0
65°	90.6	67.4	50.8	46.9	46.1
67.5°	74.5	54.8	43.7	41.0	40.6
70°	59.5	44.5	37.0	35.5	34.7
72.5°	45.7	35.5	31.1	29.9	29.6
75°	32.3	28.4	25.6	24.8	24.4
77.5°	21.7	21.7	20.5	19.7	20.1
80°	15.0	15.8	15.4	15.4	15.4
82.5°	9.9	10.6	11.0	11.0	11.0
85°	5.5	6.3	6.7	6.7	7.1
87.5°	2.0	2.4	2.8	3.2	3.2
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	13.73	15.22	14.10	15.54	15.85	9.98	11.47	10.34	11.78	12.10
	3H	15.05	16.38	15.42	16.71	17.07	11.56	12.90	11.94	13.23	13.59
	4H	15.42	16.67	15.82	17.02	17.40	12.16	13.42	12.56	13.76	14.14
	6H	15.59	16.75	16.00	17.11	17.51	12.64	13.79	13.05	14.16	14.55
	8H	15.63	16.73	16.06	17.12	17.52	12.79	13.90	13.22	14.29	14.69
	12H	15.64	16.69	16.07	17.08	17.51	12.91	13.96	13.34	14.34	14.77
4H	2H	13.84	15.10	14.25	15.45	15.83	10.64	11.89	11.04	12.24	12.62
	3H	15.33	16.37	15.74	16.77	17.17	12.42	13.46	12.83	13.86	14.26
	4H	15.81	16.74	16.24	17.16	17.60	13.14	14.07	13.57	14.49	14.93
	6H	16.10	16.91	16.55	17.35	17.81	13.73	14.54	14.19	14.98	15.44
	8H	16.16	16.92	16.63	17.37	17.83	13.93	14.69	14.40	15.13	15.60
	12H	16.21	16.88	16.69	17.36	17.83	14.09	14.76	14.57	15.24	15.71
8H	4H	15.89	16.65	16.36	17.09	17.56	13.45	14.21	13.91	14.65	15.12
	6H	16.26	16.88	16.75	17.37	17.85	14.16	14.78	14.65	15.27	15.75
	8H	16.37	16.93	16.89	17.44	17.93	14.43	14.99	14.95	15.50	15.99
	12H	16.46	16.95	16.97	17.45	18.01	14.66	15.16	15.17	15.65	16.22
12H	4H	15.89	16.56	16.37	17.04	17.51	13.47	14.15	13.96	14.63	15.10
	6H	16.26	16.82	16.77	17.33	17.82	14.21	14.77	14.72	15.28	15.77
	8H	16.42	16.91	16.93	17.41	17.97	14.54	15.04	15.05	15.53	16.10