

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: P1062079

Luminaire Tested: S125RDR-H375D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062079
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-H375D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

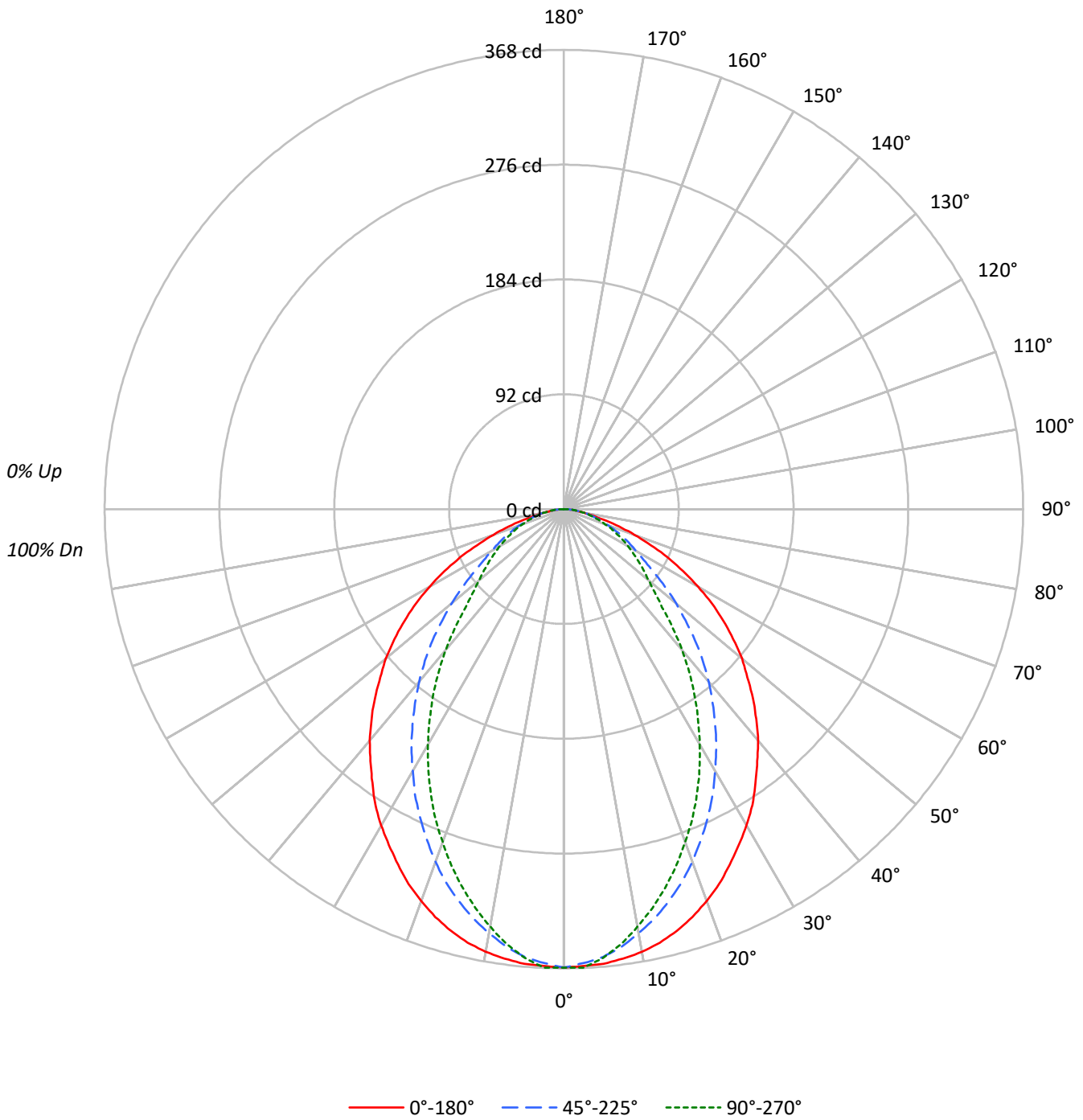
Lumens per Lamp: N/A
Luminaire Lumens: 695.9 lumens
Efficiency: N/A
Efficacy: 59.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

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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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2529	2529	2529
5°	2528	2490	2495
10°	2518	2412	2376
15°	2493	2317	2238
20°	2449	2203	2081
25°	2388	2072	1915
30°	2327	1925	1732
35°	2249	1777	1536
40°	2176	1621	1323
45°	2086	1449	1084
50°	1996	1256	948
55°	1871	1048	876
60°	1708	917	818
65°	1494	839	761
70°	1212	755	707
75°	870	689	657
80°	603	619	619
85°	442	537	569

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2086 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.2	4.9
10°-20°	92.4	13.3
20°-30°	127.7	18.3
30°-40°	136.0	19.5
40°-50°	119.5	17.2
50°-60°	90.6	13.0
60°-70°	58.8	8.5
70°-80°	29.1	4.2
80°-90°	7.7	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°	254.2	36.5
0°-40°	390.2	56.1
0°-60°	600.3	86.3
0°-90°	695.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	695.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	367	367	367	367	367	
5°	366	365	360	361	361	35
15°	350	342	325	318	314	99
25°	314	297	273	259	252	145
35°	268	243	211	192	183	168
45°	214	184	149	122	111	165
55°	156	125	87	75	73	139
65°	92	68	52	48	47	91
75°	33	29	26	25	25	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°	367.3	367.3	367.3	367.3	367.3
2.5°	366.5	367.3	364.1	366.9	367.7
5°	365.7	364.9	360.2	361.4	361.0
7.5°	363.3	361.7	353.8	353.0	351.4
10°	360.2	356.2	345.0	342.2	339.8
12.5°	355.8	349.4	335.8	330.2	327.4
15°	349.8	341.8	325.1	317.5	313.9
17.5°	342.6	331.4	313.9	303.5	299.5
20°	334.2	321.1	300.7	288.8	284.0
22.5°	325.1	309.5	286.8	274.0	268.8
25°	314.3	297.1	272.8	258.8	252.1
27.5°	303.5	284.4	258.1	242.5	235.3
30°	292.7	270.8	242.1	225.3	217.8
32.5°	281.2	256.9	227.3	209.0	200.2
35°	267.6	242.9	211.4	192.2	182.7
37.5°	254.5	228.1	195.8	174.3	165.1
40°	242.1	214.2	180.3	156.7	147.2
42.5°	228.1	199.4	164.7	140.0	129.2
45°	214.2	184.3	148.8	122.0	111.3
47.5°	199.4	169.9	132.0	105.7	98.5
50°	186.3	155.1	117.3	93.3	88.5
52.5°	171.1	140.8	102.1	83.8	80.6
55°	155.9	125.2	87.3	75.4	73.0
57.5°	140.4	111.3	75.8	68.2	65.8
60°	124.0	96.9	66.6	60.6	59.4
62.5°	107.7	82.2	58.6	54.2	52.6
65°	91.7	68.2	51.5	47.5	46.7
67.5°	75.4	55.4	44.3	41.5	41.1
70°	60.2	45.1	37.5	35.9	35.1
72.5°	46.3	35.9	31.5	30.3	29.9
75°	32.7	28.7	25.9	25.1	24.7
77.5°	21.9	21.9	20.7	19.9	20.3
80°	15.2	16.0	15.6	15.6	15.6
82.5°	10.0	10.8	11.2	11.2	11.2
85°	5.6	6.4	6.8	6.8	7.2
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	13.78	15.27	14.14	15.58	15.90	10.02	11.51	10.38	11.82	12.14
	3H	15.09	16.43	15.47	16.75	17.12	11.60	12.94	11.98	13.27	13.63
	4H	15.46	16.71	15.86	17.06	17.44	12.20	13.46	12.60	13.81	14.18
	6H	15.63	16.79	16.05	17.16	17.55	12.68	13.83	13.09	14.20	14.59
	8H	15.67	16.77	16.10	17.16	17.56	12.84	13.94	13.26	14.33	14.73
	12H	15.68	16.74	16.11	17.12	17.55	12.95	14.00	13.38	14.38	14.81
4H	2H	13.89	15.14	14.29	15.49	15.87	10.68	11.93	11.08	12.28	12.66
	3H	15.38	16.41	15.79	16.82	17.22	12.46	13.50	12.87	13.90	14.30
	4H	15.85	16.79	16.29	17.20	17.64	13.18	14.11	13.61	14.53	14.97
	6H	16.14	16.95	16.60	17.39	17.85	13.77	14.58	14.23	15.02	15.48
	8H	16.21	16.96	16.67	17.41	17.88	13.97	14.73	14.44	15.18	15.64
	12H	16.25	16.92	16.73	17.40	17.87	14.13	14.81	14.61	15.28	15.76
8H	4H	15.93	16.69	16.40	17.14	17.60	13.49	14.25	13.95	14.69	15.16
	6H	16.30	16.92	16.80	17.42	17.89	14.20	14.82	14.69	15.31	15.79
	8H	16.42	16.98	16.93	17.49	17.98	14.48	15.04	14.99	15.55	16.04
	12H	16.50	17.00	17.01	17.49	18.06	14.71	15.20	15.22	15.70	16.26
12H	4H	15.93	16.60	16.41	17.08	17.55	13.52	14.19	14.00	14.67	15.14
	6H	16.30	16.86	16.82	17.37	17.86	14.25	14.81	14.76	15.32	15.81
	8H	16.46	16.96	16.97	17.45	18.02	14.59	15.08	15.10	15.57	16.14