

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: P1058272

Luminaire Tested: S122RDR-H1005D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058272
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H1005D950-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 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

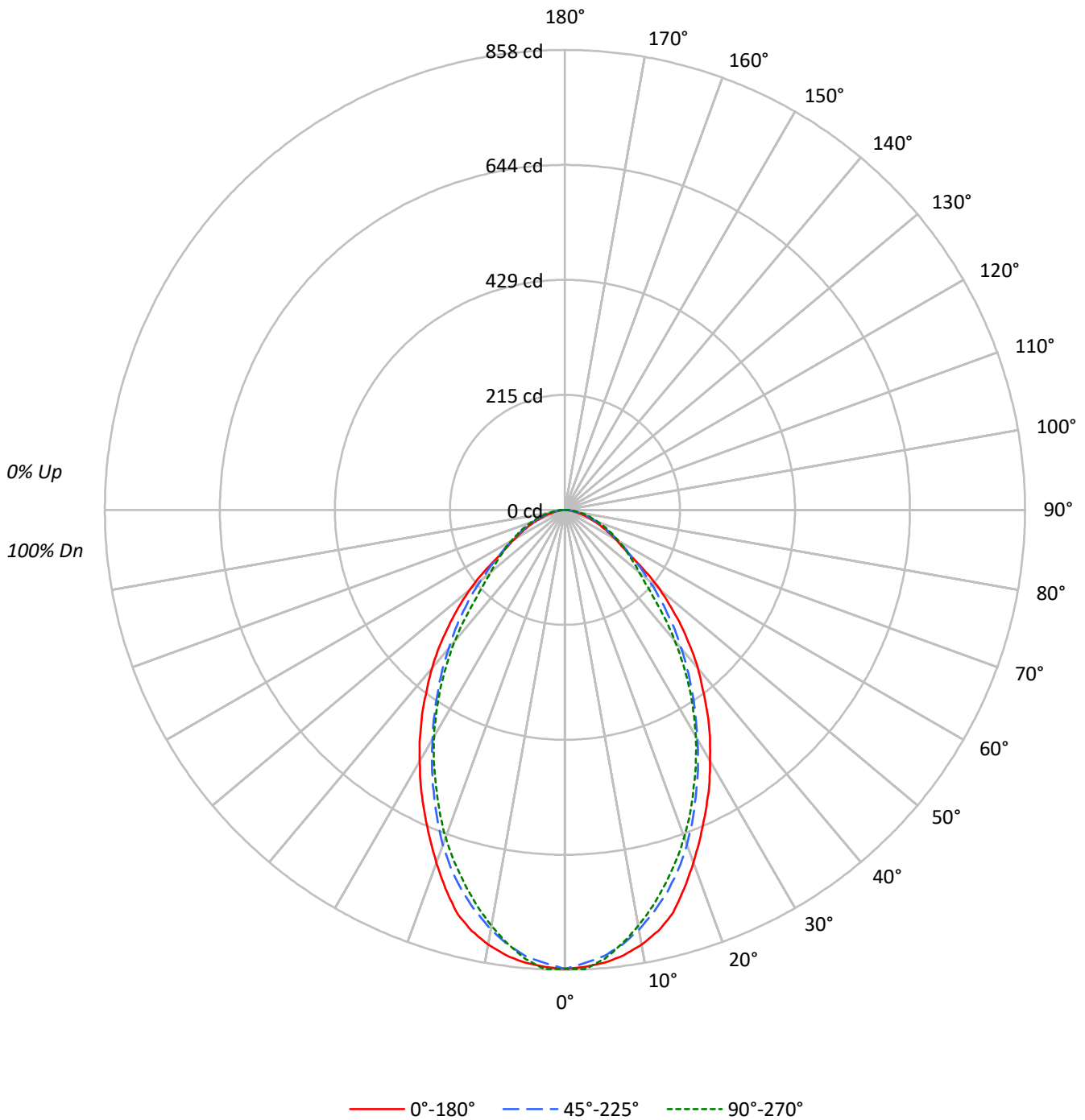
Lumens per Lamp: N/A
Luminaire Lumens: 1300.4 lumens
Efficiency: N/A
Efficacy: 35.6 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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	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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61				61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54				54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49				49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44				44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37				37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34				34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15799	15799	15799
5°	15707	15481	15582
10°	15430	14894	14767
15°	14872	14091	13804
20°	13761	13064	12770
25°	12631	11799	11575
30°	11534	10517	10400
35°	10443	9306	9092
40°	9293	8113	7684
45°	8006	6973	6156
50°	6614	5871	5167
55°	4781	4867	4649
60°	3975	4178	4226
65°	3393	3633	3868
70°	2795	3237	3528
75°	2331	2723	3208
80°	1743	2178	2901
85°	572	1164	2604

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8006 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.1	6.1
10°-20°	208.4	16.0
20°-30°	269.8	20.7
30°-40°	264.6	20.3
40°-50°	208.3	16.0
50°-60°	136.5	10.5
60°-70°	83.1	6.4
70°-80°	41.6	3.2
80°-90°	8.9	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°	557.3	42.9
0°-40°	821.9	63.2
0°-60°	1166.7	89.7
0°-90°	1300.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1300.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	856	856	856	856	856	
5°	848	848	836	841	841	80
15°	778	768	738	728	723	217
25°	620	600	580	577	568	285
35°	464	438	413	412	404	289
45°	307	288	267	248	236	236
55°	149	157	151	146	144	141
65°	78	79	83	87	89	77
75°	33	34	38	44	45	35
85°	3	4	6	10	12	6
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	856.2	856.2	856.2	856.2	856.2
2.5°	853.5	854.9	846.7	854.9	857.6
5°	848.0	848.0	835.8	841.2	841.2
7.5°	838.5	837.1	818.1	818.1	816.7
10°	823.5	818.1	794.9	790.8	788.1
12.5°	804.4	794.9	767.6	760.8	756.7
15°	778.5	767.6	737.6	728.1	722.6
17.5°	740.3	729.4	703.5	692.6	687.2
20°	700.8	684.4	665.3	655.8	650.3
22.5°	659.9	640.8	623.1	616.3	610.8
25°	620.4	599.9	579.5	576.7	568.5
27.5°	582.2	557.6	537.2	535.8	529.0
30°	541.3	515.4	493.6	494.9	488.1
32.5°	503.1	478.6	452.7	454.0	445.8
35°	463.6	437.7	413.1	411.8	403.6
37.5°	422.7	398.1	374.9	369.5	361.3
40°	385.8	361.3	336.8	327.2	319.0
42.5°	346.3	324.5	302.7	287.7	276.8
45°	306.8	287.7	267.2	248.1	235.9
47.5°	268.6	253.6	235.9	212.7	204.5
50°	230.4	219.5	204.5	184.1	180.0
52.5°	190.9	186.8	177.2	163.6	162.2
55°	148.6	156.8	151.3	145.9	144.5
57.5°	125.4	126.8	130.9	129.5	129.5
60°	107.7	107.7	113.2	114.5	114.5
62.5°	91.3	92.7	98.2	100.9	100.9
65°	77.7	79.1	83.2	87.3	88.6
67.5°	64.1	66.8	70.9	75.0	76.4
70°	51.8	54.5	60.0	64.1	65.4
72.5°	42.3	43.6	49.1	53.2	54.5
75°	32.7	34.1	38.2	43.6	45.0
77.5°	23.2	25.9	30.0	34.1	36.8
80°	16.4	17.7	20.5	25.9	27.3
82.5°	9.5	10.9	13.6	17.7	19.1
85°	2.7	4.1	5.5	9.5	12.3
87.5°	0.0	0.0	0.0	2.7	5.5
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	15.71	17.11	16.08	17.42	17.74	15.89	17.29	16.25	17.60	17.91
	3H	16.84	18.09	17.22	18.42	18.78	17.35	18.60	17.73	18.92	19.29
	4H	17.20	18.36	17.60	18.71	19.09	17.89	19.06	18.29	19.41	19.79
	6H	17.38	18.45	17.79	18.82	19.21	18.31	19.38	18.72	19.75	20.14
	8H	17.41	18.42	17.84	18.81	19.22	18.43	19.45	18.86	19.84	20.24
	12H	17.39	18.36	17.82	18.75	19.18	18.52	19.49	18.95	19.87	20.30
4H	2H	16.17	17.33	16.57	17.68	18.06	16.32	17.48	16.72	17.83	18.21
	3H	17.51	18.47	17.92	18.87	19.27	17.99	18.95	18.40	19.35	19.75
	4H	17.95	18.81	18.39	19.23	19.67	18.65	19.51	19.09	19.93	20.37
	6H	18.22	18.97	18.69	19.41	19.88	19.19	19.93	19.65	20.38	20.84
	8H	18.27	18.96	18.74	19.41	19.88	19.36	20.05	19.82	20.50	20.97
	12H	18.26	18.88	18.75	19.36	19.83	19.48	20.09	19.96	20.58	21.05
8H	4H	18.17	18.86	18.63	19.31	19.78	18.80	19.50	19.27	19.94	20.41
	6H	18.51	19.08	19.01	19.58	20.06	19.44	20.00	19.94	20.50	20.98
	8H	18.59	19.10	19.11	19.62	20.11	19.67	20.18	20.19	20.69	21.18
	12H	18.61	19.06	19.12	19.55	20.12	19.85	20.30	20.37	20.80	21.37
12H	4H	18.18	18.79	18.66	19.28	19.75	18.79	19.41	19.27	19.89	20.36
	6H	18.54	19.05	19.06	19.56	20.05	19.43	19.94	19.95	20.45	20.94
	8H	18.65	19.10	19.17	19.60	20.17	19.70	20.15	20.22	20.65	21.22