

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: P1058516

Luminaire Tested: S122RDR-H675D950-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058516
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H675D950-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER 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

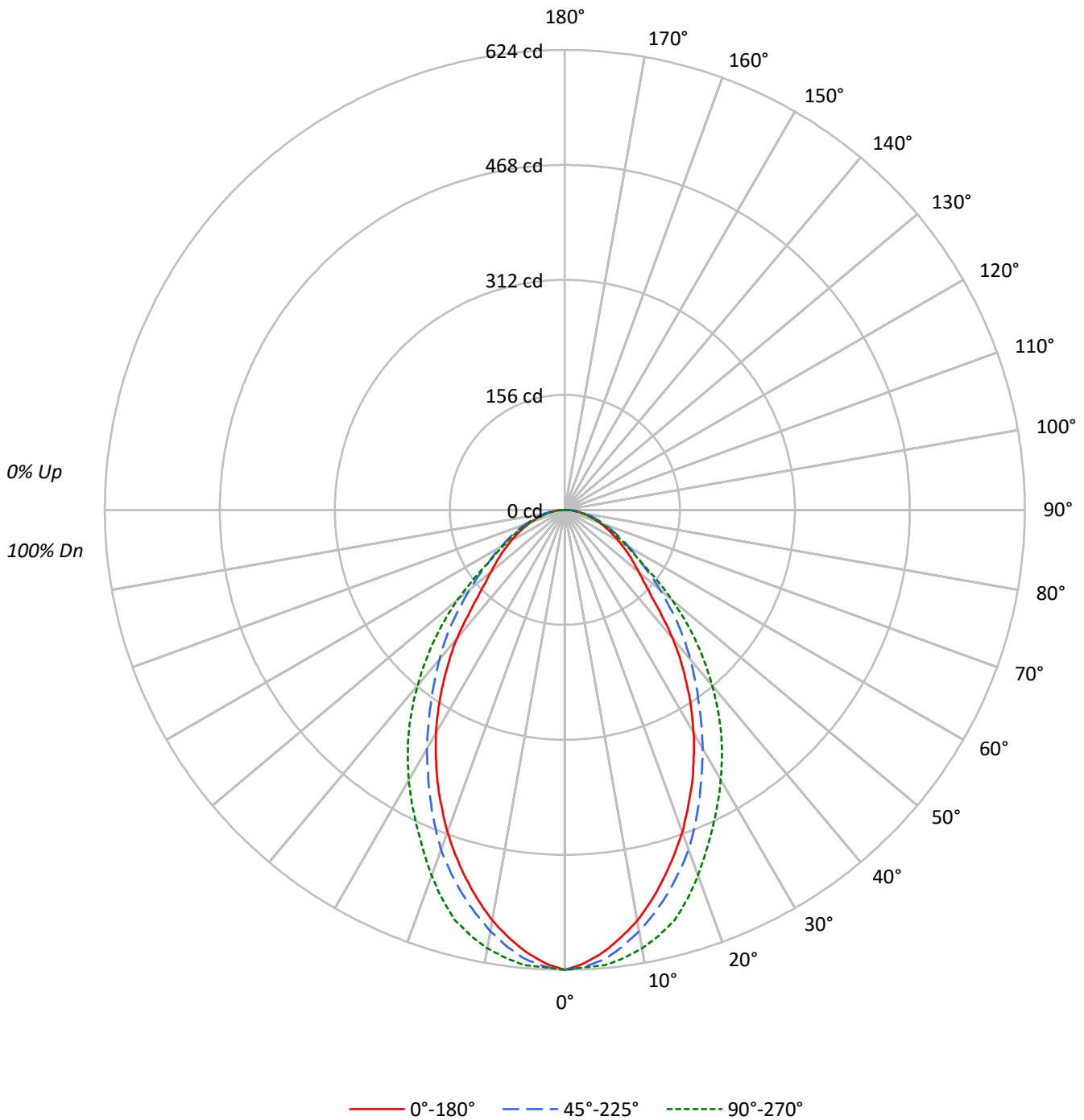
Lumens per Lamp: N/A
Luminaire Lumens: 1016.1 lumens
Efficiency: N/A
Efficacy: 43.2 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11514	11514	11514
5°	11156	11340	11492
10°	10605	10877	11319
15°	9896	10295	11004
20°	9141	9640	10368
25°	8315	8796	9663
30°	7449	7969	9011
35°	6488	7121	8323
40°	5475	6369	7482
45°	4348	5624	6547
50°	3743	4837	5434
55°	3410	4137	4166
60°	3107	3676	3543
65°	2847	3323	3122
70°	2638	3081	2784
75°	2453	2909	2453
80°	2306	2795	2210
85°	2308	2879	1927

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6547 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.6	5.7
10°-20°	152.3	15.0
20°-30°	200.4	19.7
30°-40°	201.5	19.8
40°-50°	163.3	16.1
50°-60°	112.5	11.1
60°-70°	73.6	7.2
70°-80°	41.0	4.0
80°-90°	13.9	1.4
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°	410.3	40.4
0°-40°	611.8	60.2
0°-60°	887.6	87.3
0°-90°	1016.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1016.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	624	624	624	624	624	
5°	602	614	612	615	620	56
15°	518	531	539	559	576	145
25°	408	419	432	451	475	187
35°	288	302	316	344	370	180
45°	167	186	216	235	251	132
55°	106	118	129	131	130	95
65°	65	78	76	72	72	65
75°	34	43	41	36	34	37
85°	11	14	14	12	9	12
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	624.0	624.0	624.0	624.0	624.0
2.5°	615.8	626.7	620.4	620.4	621.3
5°	602.3	614.0	612.2	614.9	620.4
7.5°	585.0	597.7	597.7	605.9	613.1
10°	566.0	578.7	580.5	593.2	604.1
12.5°	542.5	555.2	560.6	576.9	591.4
15°	518.0	530.7	538.9	558.8	576.0
17.5°	491.8	504.4	515.3	536.1	553.4
20°	465.5	477.3	490.9	509.0	528.0
22.5°	436.5	449.2	461.9	479.1	500.8
25°	408.4	419.3	432.0	451.0	474.6
27.5°	378.6	390.3	402.1	424.7	449.2
30°	349.6	361.4	374.0	397.6	422.9
32.5°	318.8	331.5	344.1	370.4	396.7
35°	288.0	301.6	316.1	344.1	369.5
37.5°	258.1	272.6	289.8	318.8	340.5
40°	227.3	242.7	264.4	289.8	310.6
42.5°	194.7	213.7	240.0	261.7	280.8
45°	166.6	185.7	215.5	234.6	250.9
47.5°	145.8	161.2	190.2	206.5	220.1
50°	130.4	142.2	168.5	180.2	189.3
52.5°	117.7	129.5	147.6	155.8	158.5
55°	106.0	117.7	128.6	131.3	129.5
57.5°	94.2	106.9	113.2	110.5	110.5
60°	84.2	97.8	99.6	96.0	96.0
62.5°	74.3	87.8	87.8	83.3	83.3
65°	65.2	77.9	76.1	72.5	71.5
67.5°	57.1	68.8	66.1	62.5	61.6
70°	48.9	59.8	57.1	52.5	51.6
72.5°	41.7	51.6	48.0	44.4	42.6
75°	34.4	42.6	40.8	36.2	34.4
77.5°	28.1	34.4	32.6	29.0	27.2
80°	21.7	27.2	26.3	22.6	20.8
82.5°	16.3	20.8	19.9	17.2	14.5
85°	10.9	14.5	13.6	11.8	9.1
87.5°	5.4	10.0	9.1	8.2	4.5
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	15.22	16.66	15.59	16.97	17.29	15.58	17.02	15.94	17.33	17.65
	3H	16.77	18.05	17.14	18.38	18.75	16.93	18.21	17.30	18.54	18.91
	4H	17.34	18.54	17.74	18.89	19.27	17.41	18.62	17.81	18.97	19.35
	6H	17.77	18.88	18.18	19.25	19.64	17.76	18.88	18.18	19.25	19.64
	8H	17.92	18.98	18.35	19.37	19.77	17.88	18.94	18.31	19.33	19.73
	12H	18.04	19.05	18.47	19.43	19.86	17.95	18.97	18.39	19.35	19.78
4H	2H	15.81	17.01	16.21	17.36	17.74	16.09	17.30	16.50	17.65	18.03
	3H	17.63	18.63	18.04	19.03	19.43	17.67	18.67	18.08	19.07	19.47
	4H	18.38	19.28	18.81	19.69	20.13	18.27	19.17	18.70	19.59	20.03
	6H	18.96	19.75	19.42	20.19	20.65	18.75	19.54	19.21	19.98	20.44
	8H	19.17	19.90	19.64	20.35	20.82	18.92	19.65	19.38	20.09	20.56
	12H	19.34	19.99	19.82	20.47	20.94	19.04	19.69	19.52	20.17	20.64
8H	4H	18.66	19.39	19.13	19.84	20.31	18.57	19.30	19.04	19.75	20.22
	6H	19.42	20.02	19.92	20.51	20.99	19.19	19.79	19.69	20.29	20.76
	8H	19.74	20.28	20.26	20.79	21.28	19.44	19.98	19.95	20.49	20.98
	12H	20.03	20.51	20.54	21.00	21.57	19.65	20.13	20.16	20.62	21.19
12H	4H	18.68	19.33	19.16	19.81	20.28	18.61	19.26	19.09	19.74	20.21
	6H	19.48	20.02	19.99	20.53	21.02	19.27	19.81	19.78	20.32	20.81
	8H	19.87	20.35	20.39	20.85	21.41	19.59	20.06	20.10	20.56	21.12