

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: P1058504

Luminaire Tested: S122RDR-H675D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058504
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H675D940-X4F0-XX-UDD-SVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

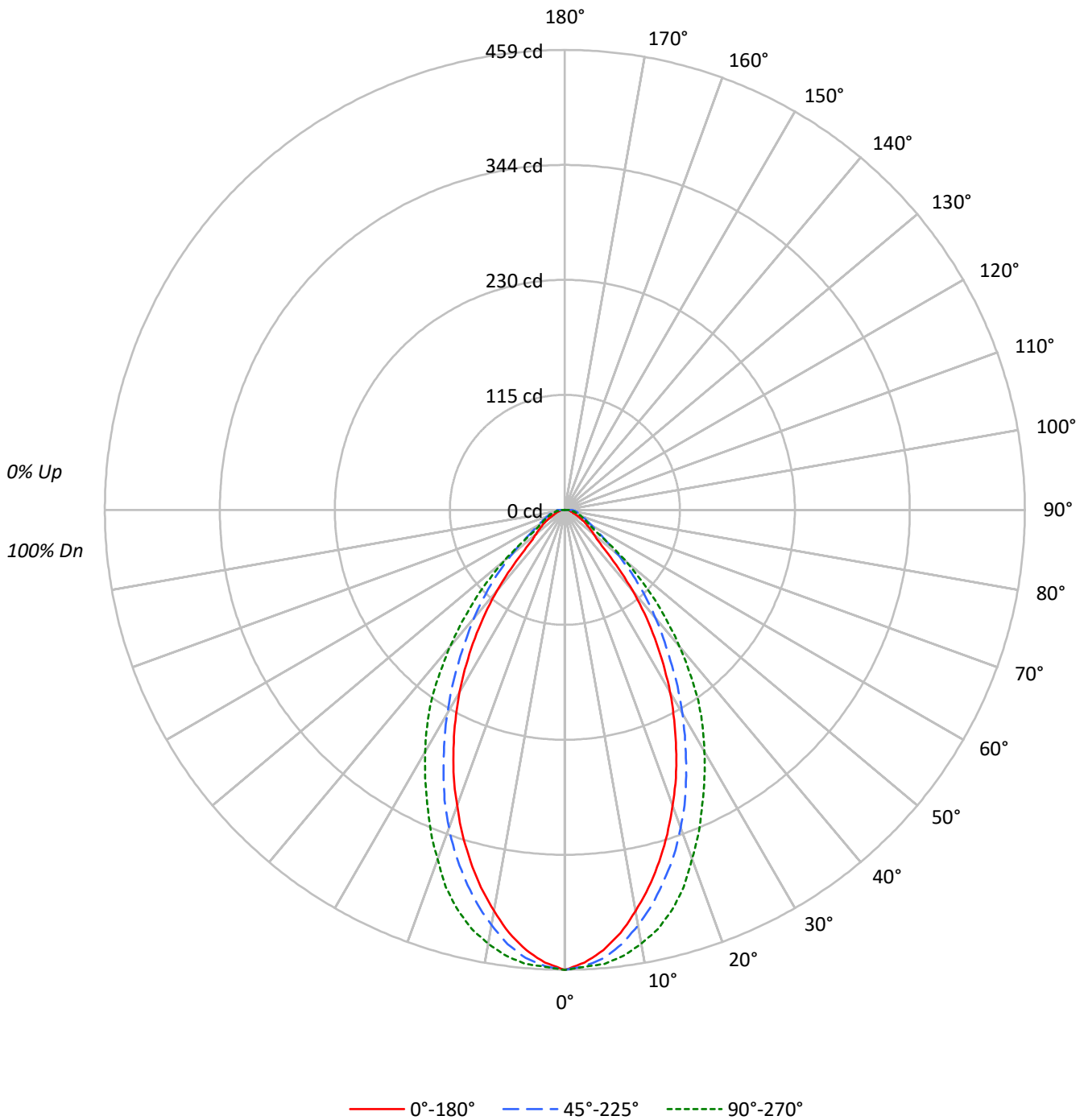
Lumens per Lamp: N/A
Luminaire Lumens: 553.8 lumens
Efficiency: N/A
Efficacy: 23.6 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59				59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50				50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42				42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8472	8472	8472
5°	8174	8315	8424
10°	7617	7886	8237
15°	6942	7313	7895
20°	6170	6635	7285
25°	5347	5829	6605
30°	4474	4999	5938
35°	3530	4140	5228
40°	2529	3387	4285
45°	1480	2675	3314
50°	1071	1946	2236
55°	901	1390	1171
60°	720	1126	1000
65°	594	1000	926
70°	502	960	869
75°	485	1027	848
80°	542	1265	903
85°	889	1969	1249

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3314 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.1	7.6
10°-20°	107.8	19.5
20°-30°	132.4	23.9
30°-40°	117.1	21.1
40°-50°	74.7	13.5
50°-60°	36.5	6.6
60°-70°	21.7	3.9
70°-80°	13.9	2.5
80°-90°	7.6	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°	282.3	51.0
0°-40°	399.4	72.1
0°-60°	510.6	92.2
0°-90°	553.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	553.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	459	459	459	459	459	
5°	441	451	449	451	455	41
15°	363	374	383	400	413	101
25°	263	272	286	304	324	120
35°	157	165	184	209	232	97
45°	57	73	102	115	127	48
55°	28	37	43	41	36	25
65°	14	25	23	21	21	14
75°	7	15	14	13	12	7
85°	4	8	9	8	6	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	459.1	459.1	459.1	459.1	459.1
2.5°	452.3	460.8	455.7	455.7	456.5
5°	441.3	450.6	448.9	450.6	454.8
7.5°	426.0	435.3	437.0	443.8	448.9
10°	406.5	415.9	420.9	432.0	439.6
12.5°	386.2	395.5	403.2	417.6	428.6
15°	363.4	373.5	382.8	399.8	413.3
17.5°	339.6	349.8	361.7	378.6	394.7
20°	314.2	323.5	337.9	354.0	371.0
22.5°	289.7	298.1	313.4	328.6	349.0
25°	262.6	271.9	286.3	304.1	324.4
27.5°	236.3	245.6	260.0	280.3	301.5
30°	210.0	218.5	234.6	255.8	278.7
32.5°	182.9	191.4	209.2	232.1	255.8
35°	156.7	165.2	183.8	209.2	232.1
37.5°	130.4	139.8	160.9	184.6	204.1
40°	105.0	116.0	140.6	160.9	177.9
42.5°	79.6	94.9	121.1	138.1	151.6
45°	56.7	72.8	102.5	115.2	127.0
47.5°	43.2	55.9	84.7	94.0	101.6
50°	37.3	45.7	67.8	74.5	77.9
52.5°	32.2	40.7	54.2	56.7	55.1
55°	28.0	37.3	43.2	40.7	36.4
57.5°	23.7	34.7	35.6	30.5	31.3
60°	19.5	31.3	30.5	26.3	27.1
62.5°	16.1	28.8	26.3	23.7	23.7
65°	13.6	25.4	22.9	21.2	21.2
67.5°	11.0	22.9	20.3	18.6	18.6
70°	9.3	20.3	17.8	16.1	16.1
72.5°	8.5	17.8	16.1	14.4	14.4
75°	6.8	15.2	14.4	12.7	11.9
77.5°	5.9	12.7	12.7	11.9	10.2
80°	5.1	11.0	11.9	10.2	8.5
82.5°	5.1	10.2	10.2	9.3	6.8
85°	4.2	8.5	9.3	8.5	5.9
87.5°	2.5	7.6	7.6	6.8	4.2
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	9.45	10.73	9.81	11.04	11.35	8.98	10.26	9.34	10.57	10.88
	3H	10.62	11.76	11.00	12.09	12.46	10.54	11.68	10.92	12.01	12.37
	4H	11.05	12.12	11.46	12.47	12.85	11.22	12.28	11.63	12.64	13.02
	6H	11.40	12.38	11.81	12.75	13.14	11.88	12.85	12.29	13.22	13.62
	8H	11.60	12.52	12.03	12.91	13.32	12.16	13.09	12.60	13.48	13.89
	12H	11.81	12.70	12.25	13.08	13.51	12.48	13.37	12.91	13.75	14.18
4H	2H	9.95	11.01	10.35	11.36	11.75	9.58	10.64	9.98	10.99	11.38
	3H	11.60	12.47	12.01	12.88	13.28	11.38	12.25	11.79	12.66	13.06
	4H	12.36	13.14	12.79	13.56	14.01	12.22	13.00	12.65	13.42	13.87
	6H	12.96	13.64	13.42	14.09	14.55	13.08	13.76	13.54	14.21	14.67
	8H	13.26	13.90	13.73	14.35	14.82	13.47	14.11	13.94	14.55	15.03
	12H	13.58	14.14	14.06	14.62	15.10	13.91	14.47	14.39	14.95	15.43
8H	4H	12.78	13.41	13.25	13.86	14.33	12.68	13.31	13.15	13.76	14.23
	6H	13.73	14.25	14.23	14.75	15.23	13.79	14.31	14.29	14.81	15.29
	8H	14.28	14.75	14.80	15.26	15.75	14.37	14.84	14.89	15.36	15.85
	12H	14.84	15.26	15.36	15.75	16.33	15.04	15.45	15.55	15.95	16.52
12H	4H	12.85	13.41	13.34	13.90	14.37	12.76	13.32	13.25	13.81	14.28
	6H	13.91	14.38	14.43	14.90	15.39	13.98	14.45	14.50	14.96	15.45
	8H	14.61	15.02	15.12	15.52	16.09	14.69	15.10	15.20	15.60	16.17