

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: P1058512

Luminaire Tested: S122RDR-H675D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058512
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H675D950-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

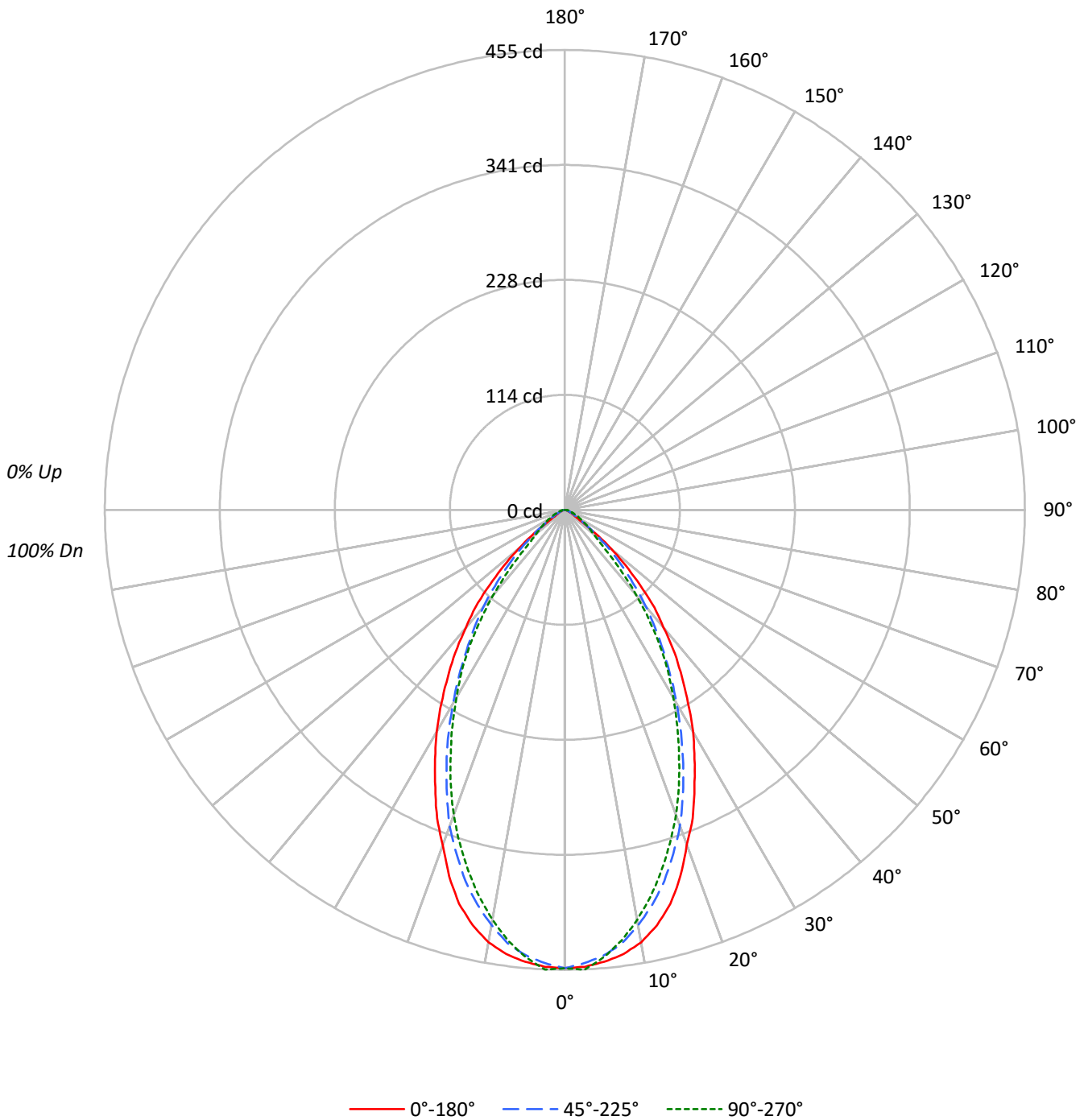
Lumens per Lamp: N/A
Luminaire Lumens: 487.6 lumens
Efficiency: N/A
Efficacy: 20.7 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92				92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84				84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	81	78	76				76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70				70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64				64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59				59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54				54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50				50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47				47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44				44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8366	8366	8366
5°	8313	8196	8230
10°	8139	7817	7714
15°	7710	7261	7053
20°	6930	6539	6309
25°	6173	5638	5436
30°	5399	4705	4570
35°	4546	3811	3690
40°	3661	3009	2659
45°	2740	2174	1581
50°	1714	1404	1039
55°	582	756	843
60°	332	469	668
65°	236	314	515
70°	194	243	388
75°	128	192	321
80°	96	191	287
85°	0	0	191

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2740 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.8	8.6
10°-20°	107.0	21.9
20°-30°	128.8	26.4
30°-40°	110.0	22.6
40°-50°	64.5	13.2
50°-60°	23.3	4.8
60°-70°	8.3	1.7
70°-80°	3.3	0.7
80°-90°	0.6	0.1
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°	277.6	56.9
0°-40°	387.6	79.5
0°-60°	475.4	97.5
0°-90°	487.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	487.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	453	453	453	453	453	
5°	449	450	442	444	444	42
15°	404	397	380	373	369	112
25°	303	290	277	272	267	139
35°	202	186	169	167	164	126
45°	105	94	83	70	61	81
55°	18	25	24	24	26	22
65°	5	6	7	10	12	6
75°	2	3	3	4	4	2
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	453.4	453.4	453.4	453.4	453.4
2.5°	452.5	453.4	448.8	453.4	455.2
5°	448.8	449.8	442.5	444.3	444.3
7.5°	443.4	442.5	432.6	430.7	429.8
10°	434.4	431.7	417.2	414.5	411.7
12.5°	420.8	415.4	400.0	395.5	391.8
15°	403.6	397.3	380.1	372.8	369.2
17.5°	380.1	372.8	356.5	349.3	345.7
20°	352.9	345.7	333.0	324.9	321.3
22.5°	330.3	318.5	305.0	299.5	295.0
25°	303.2	290.5	276.9	272.4	267.0
27.5°	277.8	262.4	248.9	245.2	240.7
30°	253.4	237.1	220.8	220.8	214.5
32.5°	227.1	211.8	194.6	193.7	190.0
35°	201.8	186.4	169.2	167.4	163.8
37.5°	178.3	162.9	146.6	141.2	136.6
40°	152.0	138.5	124.9	115.8	110.4
42.5°	131.2	115.8	102.3	91.4	84.2
45°	105.0	94.1	83.3	69.7	60.6
47.5°	81.4	74.2	65.2	49.8	45.2
50°	59.7	56.1	48.9	37.1	36.2
52.5°	38.0	39.8	35.3	29.0	31.7
55°	18.1	25.3	23.5	24.4	26.2
57.5°	11.8	12.7	17.2	19.9	21.7
60°	9.0	9.0	12.7	16.3	18.1
62.5°	7.2	7.2	10.0	13.6	14.5
65°	5.4	6.3	7.2	10.0	11.8
67.5°	4.5	4.5	5.4	8.1	9.0
70°	3.6	3.6	4.5	6.3	7.2
72.5°	2.7	2.7	3.6	5.4	5.4
75°	1.8	2.7	2.7	3.6	4.5
77.5°	1.8	1.8	1.8	2.7	3.6
80°	0.9	0.9	1.8	1.8	2.7
82.5°	0.9	0.9	0.9	0.9	1.8
85°	0.0	0.0	0.0	0.9	0.9
87.5°	0.0	0.0	0.0	0.0	0.0
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	3.28	4.44	3.64	4.75	5.07	6.66	7.82	7.02	8.13	8.45
	3H	3.79	4.81	4.17	5.14	5.51	7.38	8.40	7.76	8.73	9.10
	4H	3.92	4.87	4.33	5.22	5.61	7.59	8.54	8.00	8.89	9.28
	6H	3.99	4.86	4.41	5.23	5.63	7.74	8.61	8.16	8.98	9.38
	8H	4.00	4.81	4.43	5.21	5.61	7.77	8.59	8.21	8.98	9.39
	12H	3.96	4.74	4.40	5.13	5.56	7.77	8.55	8.21	8.94	9.37
4H	2H	3.58	4.53	3.99	4.88	5.27	6.62	7.57	7.03	7.92	8.31
	3H	4.23	5.00	4.65	5.40	5.81	7.49	8.26	7.90	8.66	9.07
	4H	4.47	5.15	4.90	5.57	6.02	7.77	8.45	8.20	8.87	9.32
	6H	4.58	5.17	5.05	5.62	6.09	7.99	8.58	8.46	9.02	9.50
	8H	4.60	5.15	5.07	5.59	6.07	8.03	8.58	8.51	9.03	9.50
	12H	4.56	5.04	5.05	5.53	6.00	8.06	8.53	8.54	9.02	9.49
8H	4H	4.57	5.12	5.04	5.57	6.04	7.70	8.24	8.17	8.69	9.17
	6H	4.74	5.18	5.24	5.68	6.16	7.96	8.40	8.46	8.90	9.38
	8H	4.78	5.18	5.31	5.69	6.19	8.02	8.41	8.54	8.93	9.43
	12H	4.76	5.10	5.28	5.60	6.18	8.08	8.42	8.59	8.92	9.50
12H	4H	4.56	5.03	5.05	5.52	6.00	7.65	8.13	8.14	8.61	9.09
	6H	4.73	5.13	5.26	5.65	6.14	7.90	8.30	8.43	8.82	9.31
	8H	4.81	5.15	5.32	5.65	6.23	7.99	8.34	8.51	8.83	9.41