

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: P1058597

Luminaire Tested: S122RDR-H865D950-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058597
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-H865D950-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

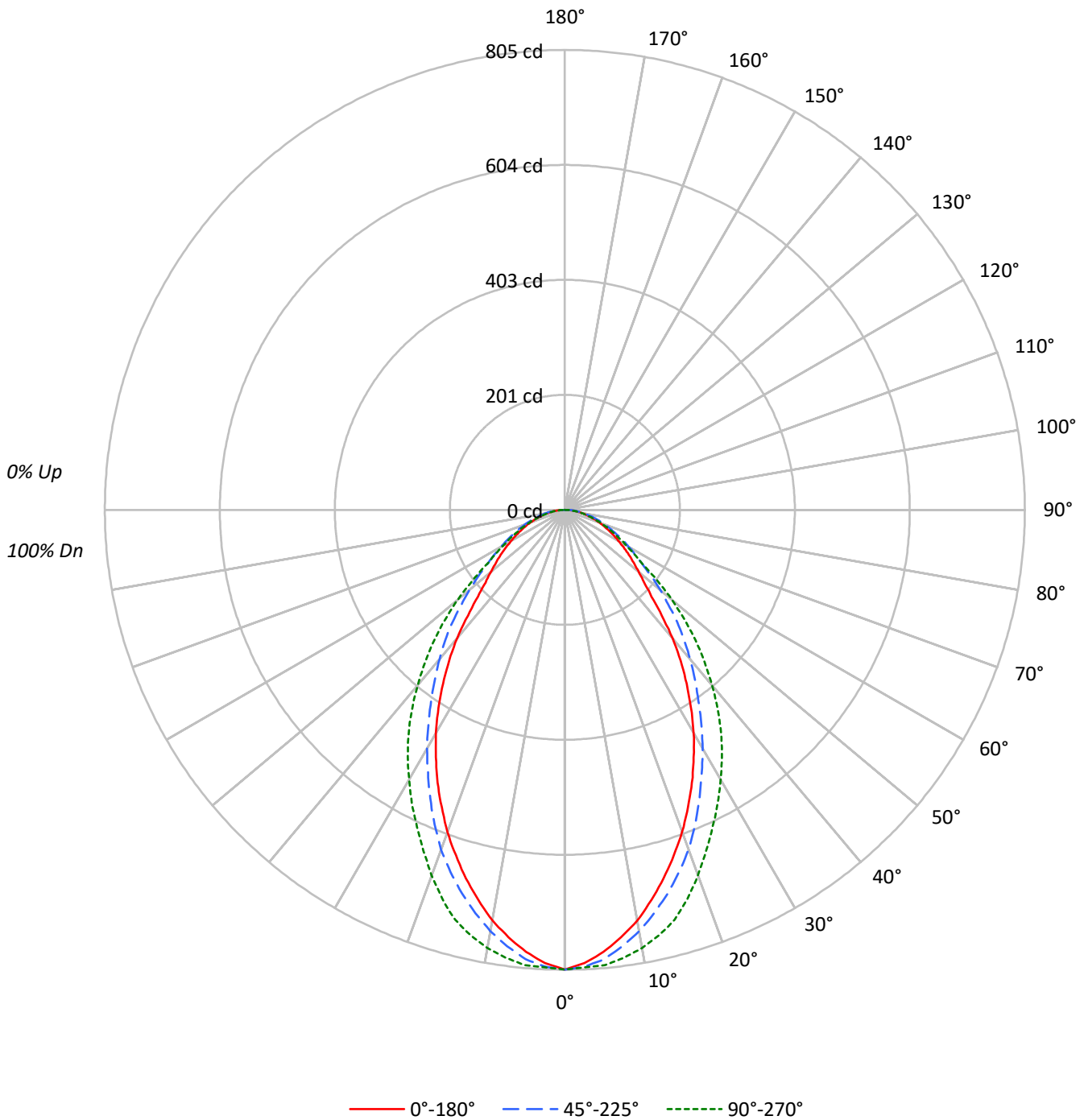
Lumens per Lamp: N/A
Luminaire Lumens: 1310.4 lumens
Efficiency: N/A
Efficacy: 42.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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				
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°	14849	14849	14849
5°	14387	14624	14818
10°	13678	14028	14596
15°	12763	13275	14190
20°	11788	12430	13371
25°	10724	11343	12460
30°	9605	10279	11621
35°	8366	9182	10734
40°	7063	8214	9650
45°	5608	7255	8442
50°	4829	6235	7007
55°	4398	5334	5373
60°	4008	4742	4569
65°	3672	4283	4030
70°	3404	3971	3593
75°	3165	3750	3165
80°	2975	3602	2858
85°	2964	3705	2477

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8442 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.3	5.7
10°-20°	196.4	15.0
20°-30°	258.4	19.7
30°-40°	259.9	19.8
40°-50°	210.6	16.1
50°-60°	145.1	11.1
60°-70°	95.0	7.2
70°-80°	52.9	4.0
80°-90°	17.9	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°	529.1	40.4
0°-40°	789.0	60.2
0°-60°	1144.6	87.4
0°-90°	1310.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1310.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	805	805	805	805	805	
5°	777	792	790	793	800	73
15°	668	684	695	721	743	187
25°	527	541	557	582	612	241
35°	371	389	408	444	476	232
45°	215	239	278	302	324	170
55°	137	152	166	169	167	122
65°	84	100	98	93	92	84
75°	44	55	53	47	44	47
85°	14	19	18	15	12	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	804.7	804.7	804.7	804.7	804.7
2.5°	794.2	808.2	800.0	800.0	801.2
5°	776.7	791.9	789.5	793.0	800.0
7.5°	754.5	770.9	770.9	781.4	790.7
10°	730.0	746.3	748.7	765.0	779.0
12.5°	699.6	716.0	723.0	744.0	762.7
15°	668.1	684.4	694.9	720.6	742.8
17.5°	634.2	650.6	664.6	691.4	713.6
20°	600.3	615.5	633.0	656.4	680.9
22.5°	563.0	579.3	595.7	617.8	645.9
25°	526.7	540.8	557.1	581.6	612.0
27.5°	488.2	503.4	518.6	547.8	579.3
30°	450.8	466.0	482.4	512.7	545.4
32.5°	411.1	427.5	443.8	477.7	511.6
35°	371.4	388.9	407.6	443.8	476.5
37.5°	332.9	351.6	373.7	411.1	439.2
40°	293.2	313.0	341.0	373.7	400.6
42.5°	251.1	275.6	309.5	337.5	362.1
45°	214.9	239.4	278.0	302.5	323.5
47.5°	188.0	207.9	245.3	266.3	283.8
50°	168.2	183.4	217.2	232.4	244.1
52.5°	151.8	167.0	190.4	200.9	204.4
55°	136.7	151.8	165.8	169.4	167.0
57.5°	121.5	137.8	146.0	142.5	142.5
60°	108.6	126.1	128.5	123.8	123.8
62.5°	95.8	113.3	113.3	107.5	107.5
65°	84.1	100.4	98.1	93.4	92.3
67.5°	73.6	88.8	85.3	80.6	79.4
70°	63.1	77.1	73.6	67.7	66.6
72.5°	53.7	66.6	61.9	57.2	54.9
75°	44.4	54.9	52.6	46.7	44.4
77.5°	36.2	44.4	42.0	37.4	35.0
80°	28.0	35.0	33.9	29.2	26.9
82.5°	21.0	26.9	25.7	22.2	18.7
85°	14.0	18.7	17.5	15.2	11.7
87.5°	7.0	12.8	11.7	10.5	5.8
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	16.10	17.54	16.47	17.86	18.17	16.46	17.90	16.83	18.22	18.53
	3H	17.65	18.94	18.03	19.27	19.63	17.81	19.10	18.19	19.43	19.79
	4H	18.22	19.43	18.62	19.78	20.16	18.29	19.50	18.69	19.85	20.23
	6H	18.65	19.76	19.06	20.13	20.52	18.65	19.76	19.06	20.13	20.52
	8H	18.80	19.86	19.23	20.25	20.66	18.76	19.82	19.19	20.21	20.61
	12H	18.92	19.93	19.35	20.31	20.74	18.84	19.85	19.27	20.23	20.66
4H	2H	16.69	17.90	17.09	18.25	18.63	16.98	18.19	17.38	18.53	18.92
	3H	18.51	19.51	18.92	19.91	20.32	18.55	19.55	18.96	19.95	20.35
	4H	19.26	20.16	19.69	20.58	21.02	19.15	20.05	19.59	20.47	20.91
	6H	19.84	20.63	20.30	21.07	21.53	19.64	20.42	20.10	20.86	21.32
	8H	20.05	20.79	20.52	21.23	21.70	19.80	20.53	20.27	20.98	21.45
	12H	20.22	20.87	20.71	21.35	21.83	19.92	20.57	20.41	21.05	21.53
8H	4H	19.54	20.27	20.01	20.72	21.19	19.45	20.19	19.92	20.63	21.10
	6H	20.30	20.90	20.80	21.40	21.87	20.07	20.68	20.57	21.17	21.65
	8H	20.62	21.17	21.14	21.68	22.17	20.32	20.86	20.84	21.38	21.87
	12H	20.91	21.39	21.42	21.88	22.45	20.53	21.01	21.05	21.51	22.07
12H	4H	19.56	20.21	20.05	20.69	21.17	19.49	20.14	19.97	20.62	21.09
	6H	20.36	20.90	20.88	21.41	21.90	20.15	20.69	20.67	21.20	21.69
	8H	20.76	21.24	21.27	21.73	22.30	20.47	20.95	20.98	21.44	22.01