

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: P1058453

Luminaire Tested: S122RDR-H675D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058453
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-H675D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

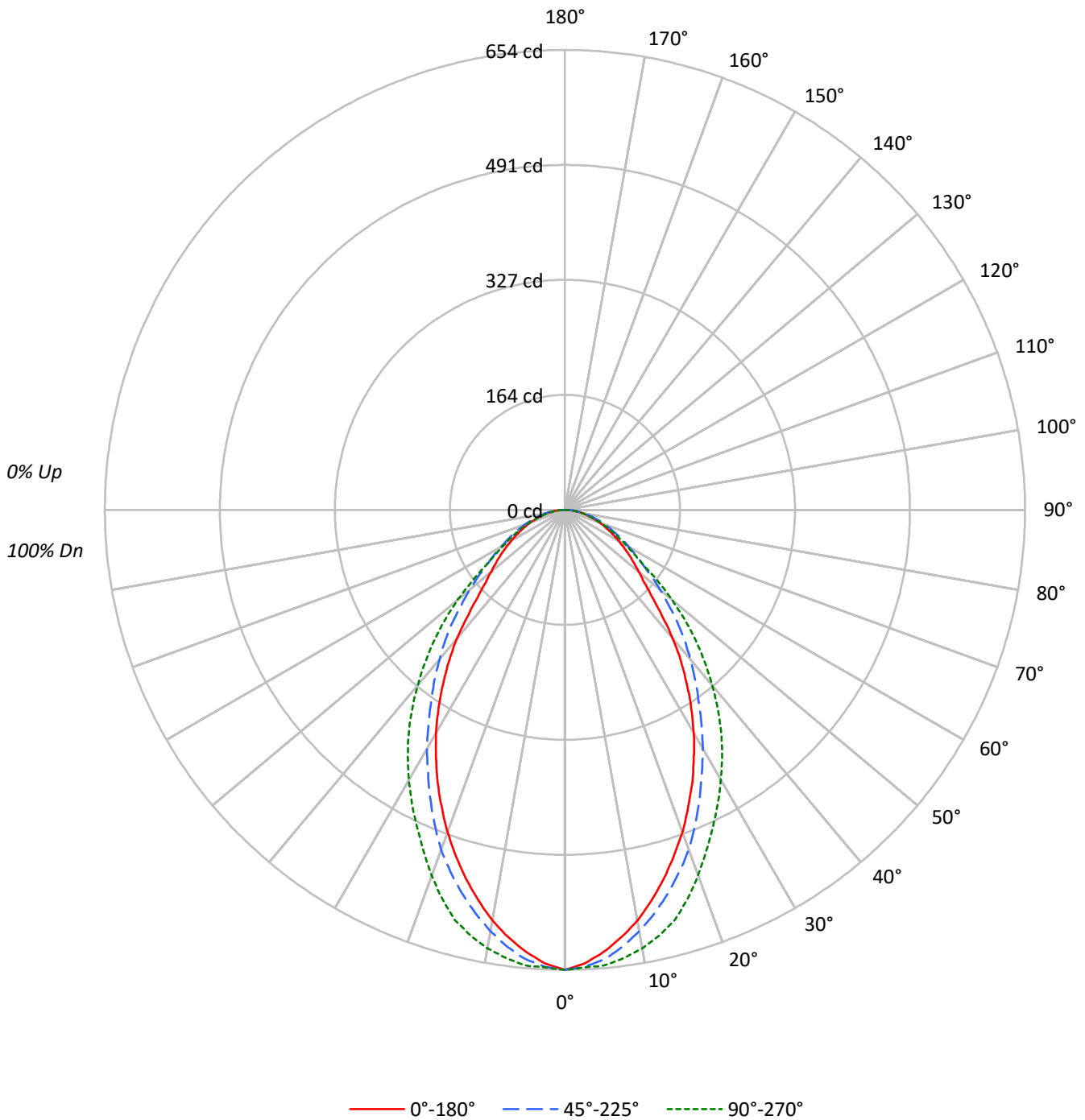
Lumens per Lamp: N/A
Luminaire Lumens: 1065.1 lumens
Efficiency: N/A
Efficacy: 45.3 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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°	12070	12070	12070
5°	11694	11886	12045
10°	11117	11402	11864
15°	10373	10790	11535
20°	9581	10103	10869
25°	8716	9219	10127
30°	7807	8355	9445
35°	6801	7463	8724
40°	5740	6677	7843
45°	4559	5895	6863
50°	3924	5070	5695
55°	3574	4337	4369
60°	3259	3853	3713
65°	2986	3480	3275
70°	2768	3226	2919
75°	2574	3044	2574
80°	2423	2922	2317
85°	2414	3006	2011

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6863 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.4	5.7
10°-20°	159.6	15.0
20°-30°	210.1	19.7
30°-40°	211.2	19.8
40°-50°	171.2	16.1
50°-60°	117.9	11.1
60°-70°	77.2	7.2
70°-80°	43.0	4.0
80°-90°	14.5	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°	430.0	40.4
0°-40°	641.3	60.2
0°-60°	930.4	87.4
0°-90°	1065.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1065.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	654	654	654	654	654	
5°	631	644	642	645	650	59
15°	543	556	565	586	604	152
25°	428	440	453	473	497	196
35°	302	316	331	361	387	188
45°	175	195	226	246	263	138
55°	111	123	135	138	136	100
65°	68	82	80	76	75	68
75°	36	45	43	38	36	39
85°	11	15	14	12	10	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	654.1	654.1	654.1	654.1	654.1
2.5°	645.5	656.9	650.3	650.3	651.2
5°	631.3	643.6	641.7	644.6	650.3
7.5°	613.3	626.5	626.5	635.1	642.7
10°	593.3	606.6	608.5	621.8	633.2
12.5°	568.6	581.9	587.6	604.7	619.9
15°	543.0	556.3	564.8	585.7	603.8
17.5°	515.5	528.8	540.2	562.0	580.0
20°	487.9	500.3	514.5	533.5	553.5
22.5°	457.6	470.9	484.2	502.2	525.0
25°	428.1	439.5	452.8	472.8	497.4
27.5°	396.8	409.2	421.5	445.2	470.9
30°	366.4	378.8	392.1	416.7	443.3
32.5°	334.2	347.4	360.7	388.3	415.8
35°	301.9	316.1	331.3	360.7	387.3
37.5°	270.6	285.7	303.8	334.2	356.9
40°	238.3	254.4	277.2	303.8	325.6
42.5°	204.1	224.0	251.6	274.4	294.3
45°	174.7	194.6	225.9	245.9	263.0
47.5°	152.8	169.0	199.4	216.4	230.7
50°	136.7	149.0	176.6	188.9	198.4
52.5°	123.4	135.8	154.7	163.3	166.1
55°	111.1	123.4	134.8	137.7	135.8
57.5°	98.7	112.0	118.7	115.8	115.8
60°	88.3	102.5	104.4	100.6	100.6
62.5°	77.8	92.1	92.1	87.3	87.3
65°	68.4	81.6	79.7	75.9	75.0
67.5°	59.8	72.1	69.3	65.5	64.6
70°	51.3	62.7	59.8	55.1	54.1
72.5°	43.7	54.1	50.3	46.5	44.6
75°	36.1	44.6	42.7	38.0	36.1
77.5°	29.4	36.1	34.2	30.4	28.5
80°	22.8	28.5	27.5	23.7	21.8
82.5°	17.1	21.8	20.9	18.0	15.2
85°	11.4	15.2	14.2	12.3	9.5
87.5°	5.7	10.4	9.5	8.5	4.7
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	15.38	16.82	15.75	17.14	17.45	15.74	17.18	16.11	17.50	17.81
	3H	16.93	18.22	17.31	18.54	18.91	17.09	18.38	17.47	18.71	19.07
	4H	17.50	18.71	17.90	19.06	19.44	17.57	18.78	17.97	19.13	19.51
	6H	17.93	19.04	18.34	19.41	19.80	17.93	19.04	18.34	19.41	19.80
	8H	18.08	19.14	18.51	19.53	19.94	18.04	19.10	18.47	19.49	19.89
	12H	18.20	19.21	18.63	19.59	20.02	18.12	19.13	18.55	19.51	19.94
4H	2H	15.97	17.18	16.37	17.52	17.91	16.26	17.46	16.66	17.81	18.19
	3H	17.79	18.79	18.20	19.19	19.59	17.83	18.83	18.24	19.23	19.63
	4H	18.54	19.44	18.97	19.86	20.30	18.43	19.34	18.87	19.75	20.19
	6H	19.12	19.91	19.58	20.35	20.81	18.92	19.70	19.38	20.14	20.60
	8H	19.33	20.07	19.80	20.51	20.98	19.08	19.81	19.54	20.26	20.73
	12H	19.50	20.15	19.99	20.63	21.11	19.20	19.85	19.68	20.33	20.81
8H	4H	18.82	19.55	19.29	20.00	20.47	18.74	19.47	19.20	19.91	20.38
	6H	19.58	20.18	20.08	20.68	21.15	19.35	19.96	19.85	20.45	20.93
	8H	19.90	20.44	20.42	20.96	21.45	19.60	20.14	20.12	20.66	21.14
	12H	20.19	20.67	20.70	21.16	21.73	19.81	20.29	20.32	20.78	21.35
12H	4H	18.84	19.49	19.32	19.97	20.45	18.77	19.42	19.25	19.90	20.37
	6H	19.64	20.18	20.15	20.69	21.18	19.43	19.97	19.95	20.48	20.97
	8H	20.04	20.52	20.55	21.01	21.58	19.75	20.23	20.26	20.72	21.29