

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: P1058454

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058454
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55)
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-W
Description: DEFINE 2 WHITE 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

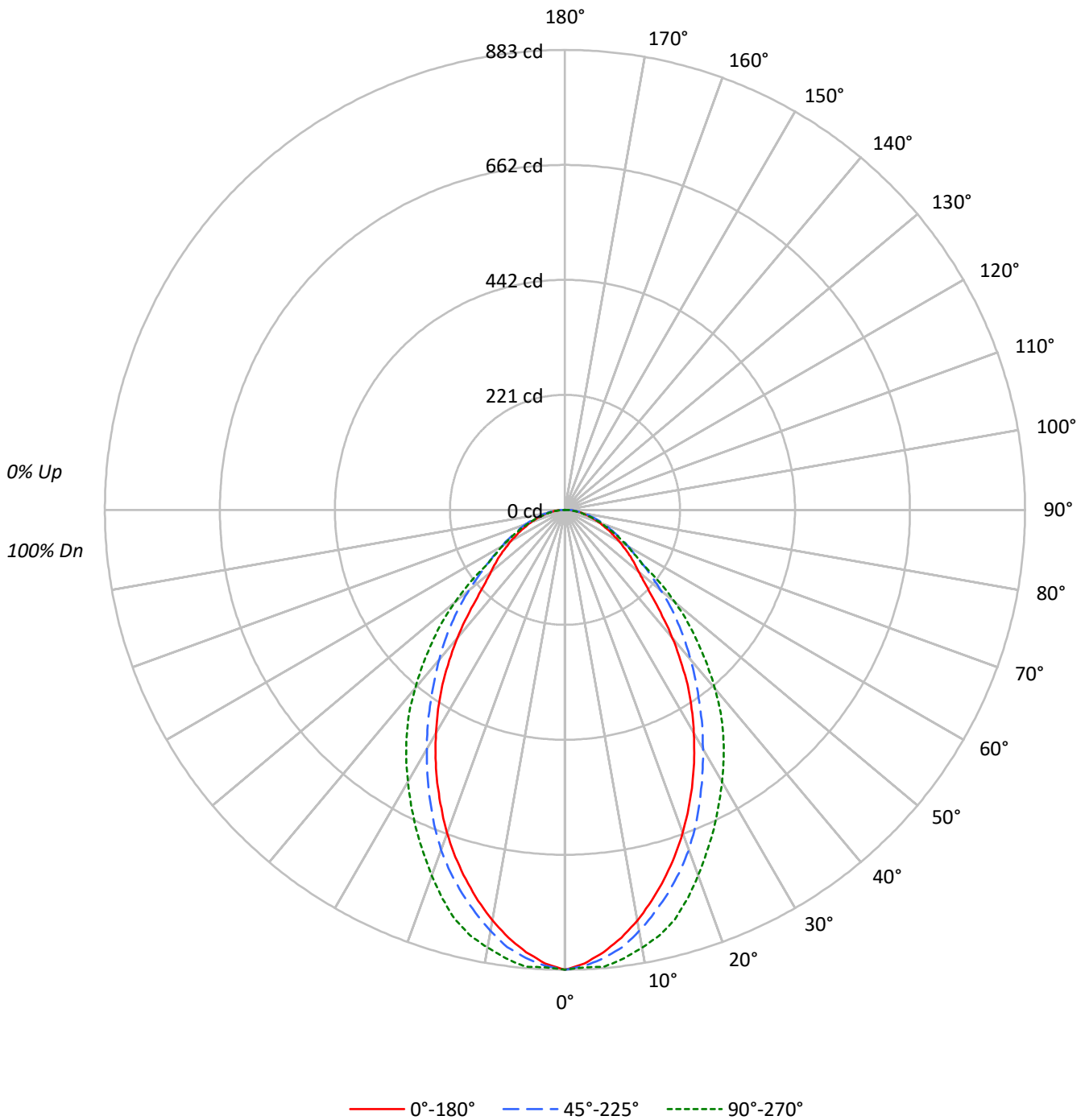
Lumens per Lamp: N/A
Luminaire Lumens: 1439.4 lumens
Efficiency: N/A
Efficacy: 61.3 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	100	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	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59
5	81	70	62	56	80	69	62	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	46	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	40	35	46	39	35	45	39	35	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16292	16292	16292
5°	15791	16002	16302
10°	14995	15387	15992
15°	14037	14563	15562
20°	12976	13646	14673
25°	11791	12487	13763
30°	10538	11286	12846
35°	9238	10117	11932
40°	7730	9033	10772
45°	6193	8001	9415
50°	5314	6895	7903
55°	4858	5865	5833
60°	4414	5185	5082
65°	4021	4641	4436
70°	3690	4251	3944
75°	3451	3928	3451
80°	3230	3634	3029
85°	3218	3811	2604

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9415 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.5	5.7
10°-20°	215.8	15.0
20°-30°	284.6	19.8
30°-40°	286.6	19.9
40°-50°	233.3	16.2
50°-60°	159.0	11.0
60°-70°	103.2	7.2
70°-80°	56.8	3.9
80°-90°	18.5	1.3
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°	581.9	40.4
0°-40°	868.5	60.3
0°-60°	1260.8	87.6
0°-90°	1439.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1439.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	883	883	883	883	883	
5°	852	869	864	872	880	80
15°	735	754	762	794	815	206
25°	579	598	613	641	676	266
35°	410	431	449	488	530	255
45°	237	267	307	333	361	187
55°	151	166	182	183	181	135
65°	92	109	106	101	102	92
75°	48	60	55	49	48	51
85°	15	20	18	14	12	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	882.9	882.9	882.9	882.9	882.9
2.5°	871.5	885.8	876.3	877.2	879.1
5°	852.5	868.7	863.9	871.5	880.1
7.5°	828.8	844.9	846.8	858.2	868.7
10°	800.3	818.4	821.2	838.3	853.5
12.5°	769.0	788.9	792.7	817.4	837.3
15°	734.8	753.8	762.3	793.7	814.6
17.5°	698.7	716.8	730.1	758.5	782.3
20°	660.8	677.9	694.9	720.6	747.2
22.5°	619.9	638.9	655.1	680.7	711.1
25°	579.1	598.1	613.3	640.8	676.0
27.5°	537.3	556.3	571.5	601.0	638.9
30°	494.6	514.6	529.7	563.0	602.9
32.5°	452.9	472.8	489.9	525.0	566.8
35°	410.1	431.0	449.1	488.0	529.7
37.5°	364.6	388.3	411.1	450.0	490.8
40°	320.9	347.5	375.0	411.1	447.2
42.5°	277.2	306.6	340.8	371.2	404.4
45°	237.3	266.8	306.6	333.2	360.8
47.5°	206.0	230.7	273.4	295.3	319.9
50°	185.1	202.2	240.2	257.3	275.3
52.5°	168.0	182.3	208.9	220.3	229.7
55°	151.0	166.1	182.3	183.2	181.3
57.5°	133.9	151.0	159.5	152.8	156.6
60°	119.6	136.7	140.5	133.9	137.7
62.5°	104.4	123.4	123.4	116.8	118.7
65°	92.1	109.2	106.3	100.6	101.6
67.5°	79.7	96.8	92.1	86.4	86.4
70°	68.4	84.5	78.8	73.1	73.1
72.5°	57.9	71.2	67.4	60.8	59.8
75°	48.4	59.8	55.1	49.4	48.4
77.5°	38.9	48.4	44.6	39.9	38.0
80°	30.4	38.9	34.2	30.4	28.5
82.5°	22.8	29.4	25.6	21.8	19.9
85°	15.2	19.9	18.0	14.2	12.3
87.5°	7.6	13.3	11.4	9.5	7.6
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	16.42	17.86	16.78	18.17	18.48	16.66	18.10	17.03	18.41	18.73
	3H	17.94	19.23	18.32	19.56	19.92	18.02	19.31	18.40	19.63	20.00
	4H	18.51	19.71	18.91	20.06	20.44	18.50	19.71	18.90	20.05	20.44
	6H	18.93	20.04	19.34	20.41	20.80	18.85	19.96	19.26	20.33	20.72
	8H	19.08	20.14	19.51	20.53	20.93	18.96	20.01	19.38	20.40	20.81
	12H	19.20	20.21	19.63	20.59	21.02	19.03	20.04	19.46	20.42	20.85
4H	2H	16.99	18.19	17.39	18.54	18.92	17.18	18.39	17.58	18.74	19.12
	3H	18.79	19.79	19.20	20.19	20.59	18.76	19.76	19.17	20.16	20.56
	4H	19.53	20.43	19.97	20.85	21.29	19.35	20.25	19.79	20.67	21.11
	6H	20.12	20.90	20.58	21.34	21.80	19.82	20.60	20.28	21.05	21.51
	8H	20.33	21.06	20.79	21.50	21.97	19.97	20.70	20.44	21.15	21.62
	12H	20.49	21.14	20.98	21.62	22.10	20.08	20.73	20.56	21.21	21.68
8H	4H	19.80	20.53	20.26	20.97	21.44	19.64	20.37	20.11	20.82	21.29
	6H	20.55	21.15	21.05	21.65	22.13	20.24	20.84	20.73	21.33	21.81
	8H	20.88	21.42	21.39	21.93	22.42	20.46	21.00	20.97	21.51	22.00
	12H	21.16	21.64	21.67	22.13	22.70	20.64	21.12	21.15	21.61	22.18
12H	4H	19.81	20.46	20.30	20.94	21.41	19.68	20.33	20.16	20.81	21.28
	6H	20.60	21.14	21.11	21.65	22.14	20.30	20.84	20.82	21.36	21.84
	8H	20.99	21.47	21.51	21.96	22.53	20.59	21.06	21.10	21.56	22.12