

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: P1058488

Luminaire Tested: S122RDR-H675D930-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058488
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H675D930-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

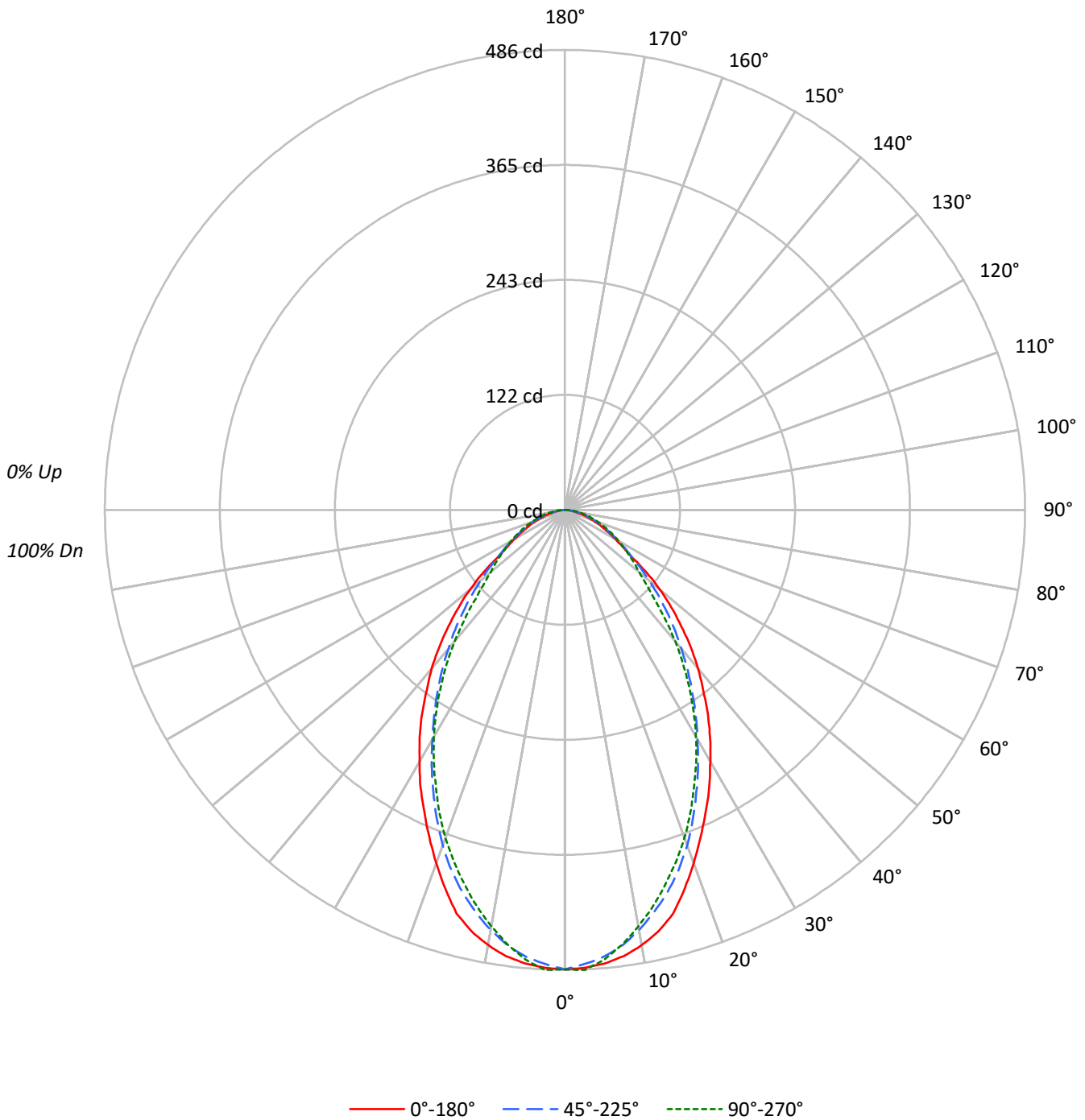
Lumens per Lamp: N/A
Luminaire Lumens: 737.7 lumens
Efficiency: N/A
Efficacy: 31.4 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8962	8962	8962
5°	8911	8782	8839
10°	8752	8449	8375
15°	8436	7993	7830
20°	7806	7411	7244
25°	7165	6692	6566
30°	6541	5966	5900
35°	5924	5278	5156
40°	5273	4601	4360
45°	4541	3956	3492
50°	3752	3330	2931
55°	2712	2763	2638
60°	2255	2369	2399
65°	1926	2061	2196
70°	1586	1834	2002
75°	1326	1547	1818
80°	988	1233	1647
85°	318	656	1482

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4541 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.9	6.1
10°-20°	118.2	16.0
20°-30°	153.0	20.7
30°-40°	150.1	20.3
40°-50°	118.2	16.0
50°-60°	77.5	10.5
60°-70°	47.2	6.4
70°-80°	23.6	3.2
80°-90°	5.1	0.7
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°	316.2	42.9
0°-40°	466.2	63.2
0°-60°	661.9	89.7
0°-90°	737.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	737.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	486	486	486	486	486	
5°	481	481	474	477	477	45
15°	442	435	418	413	410	123
25°	352	340	329	327	322	162
35°	263	248	234	234	229	164
45°	174	163	152	141	134	134
55°	84	89	86	83	82	80
65°	44	45	47	50	50	44
75°	19	19	22	25	26	20
85°	2	2	3	5	7	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	485.7	485.7	485.7	485.7	485.7
2.5°	484.2	484.9	480.3	484.9	486.5
5°	481.1	481.1	474.1	477.2	477.2
7.5°	475.7	474.9	464.1	464.1	463.3
10°	467.1	464.1	450.9	448.6	447.0
12.5°	456.3	450.9	435.4	431.6	429.3
15°	441.6	435.4	418.4	413.0	409.9
17.5°	420.0	413.8	399.1	392.9	389.8
20°	397.5	388.3	377.4	372.0	368.9
22.5°	374.3	363.5	353.5	349.6	346.5
25°	351.9	340.3	328.7	327.2	322.5
27.5°	330.3	316.3	304.7	304.0	300.1
30°	307.0	292.4	280.0	280.8	276.9
32.5°	285.4	271.5	256.8	257.6	252.9
35°	263.0	248.3	234.3	233.6	228.9
37.5°	239.8	225.8	212.7	209.6	205.0
40°	218.9	205.0	191.0	185.6	181.0
42.5°	196.4	184.1	171.7	163.2	157.0
45°	174.0	163.2	151.6	140.8	133.8
47.5°	152.4	143.9	133.8	120.7	116.0
50°	130.7	124.5	116.0	104.4	102.1
52.5°	108.3	106.0	100.5	92.8	92.0
55°	84.3	88.9	85.9	82.8	82.0
57.5°	71.2	71.9	74.2	73.5	73.5
60°	61.1	61.1	64.2	65.0	65.0
62.5°	51.8	52.6	55.7	57.2	57.2
65°	44.1	44.9	47.2	49.5	50.3
67.5°	36.4	37.9	40.2	42.5	43.3
70°	29.4	30.9	34.0	36.4	37.1
72.5°	24.0	24.7	27.8	30.2	30.9
75°	18.6	19.3	21.7	24.7	25.5
77.5°	13.1	14.7	17.0	19.3	20.9
80°	9.3	10.1	11.6	14.7	15.5
82.5°	5.4	6.2	7.7	10.1	10.8
85°	1.5	2.3	3.1	5.4	7.0
87.5°	0.0	0.0	0.0	1.5	3.1
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	13.74	15.14	14.11	15.45	15.76	13.92	15.32	14.29	15.63	15.95
	3H	14.87	16.12	15.25	16.45	16.81	15.38	16.63	15.76	16.96	17.32
	4H	15.23	16.39	15.63	16.74	17.12	15.92	17.09	16.32	17.44	17.82
	6H	15.41	16.48	15.82	16.85	17.24	16.34	17.41	16.75	17.78	18.17
	8H	15.44	16.45	15.87	16.84	17.25	16.46	17.48	16.89	17.87	18.27
	12H	15.42	16.39	15.85	16.78	17.21	16.55	17.52	16.98	17.90	18.33
4H	2H	14.20	15.36	14.60	15.71	16.09	14.35	15.51	14.75	15.86	16.24
	3H	15.54	16.50	15.95	16.90	17.30	16.02	16.98	16.43	17.38	17.78
	4H	15.98	16.84	16.42	17.26	17.70	16.68	17.54	17.12	17.96	18.40
	6H	16.25	17.00	16.71	17.44	17.91	17.22	17.96	17.68	18.41	18.87
	8H	16.30	16.99	16.77	17.44	17.91	17.39	18.08	17.85	18.53	19.00
	12H	16.29	16.91	16.78	17.39	17.86	17.51	18.13	17.99	18.61	19.08
8H	4H	16.20	16.89	16.66	17.34	17.81	16.83	17.53	17.30	17.97	18.44
	6H	16.54	17.11	17.04	17.61	18.09	17.47	18.03	17.97	18.53	19.01
	8H	16.62	17.13	17.14	17.65	18.14	17.70	18.21	18.22	18.72	19.21
	12H	16.64	17.09	17.15	17.58	18.15	17.88	18.33	18.40	18.83	19.40
12H	4H	16.21	16.82	16.69	17.30	17.78	16.82	17.44	17.30	17.92	18.39
	6H	16.57	17.08	17.09	17.59	18.08	17.46	17.97	17.98	18.48	18.97
	8H	16.68	17.13	17.20	17.63	18.20	17.74	18.19	18.25	18.68	19.25