

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059132

Luminaire Tested: S123RDRP-S1165D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059132
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1165D930-X4F0-XX-UDD-BVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

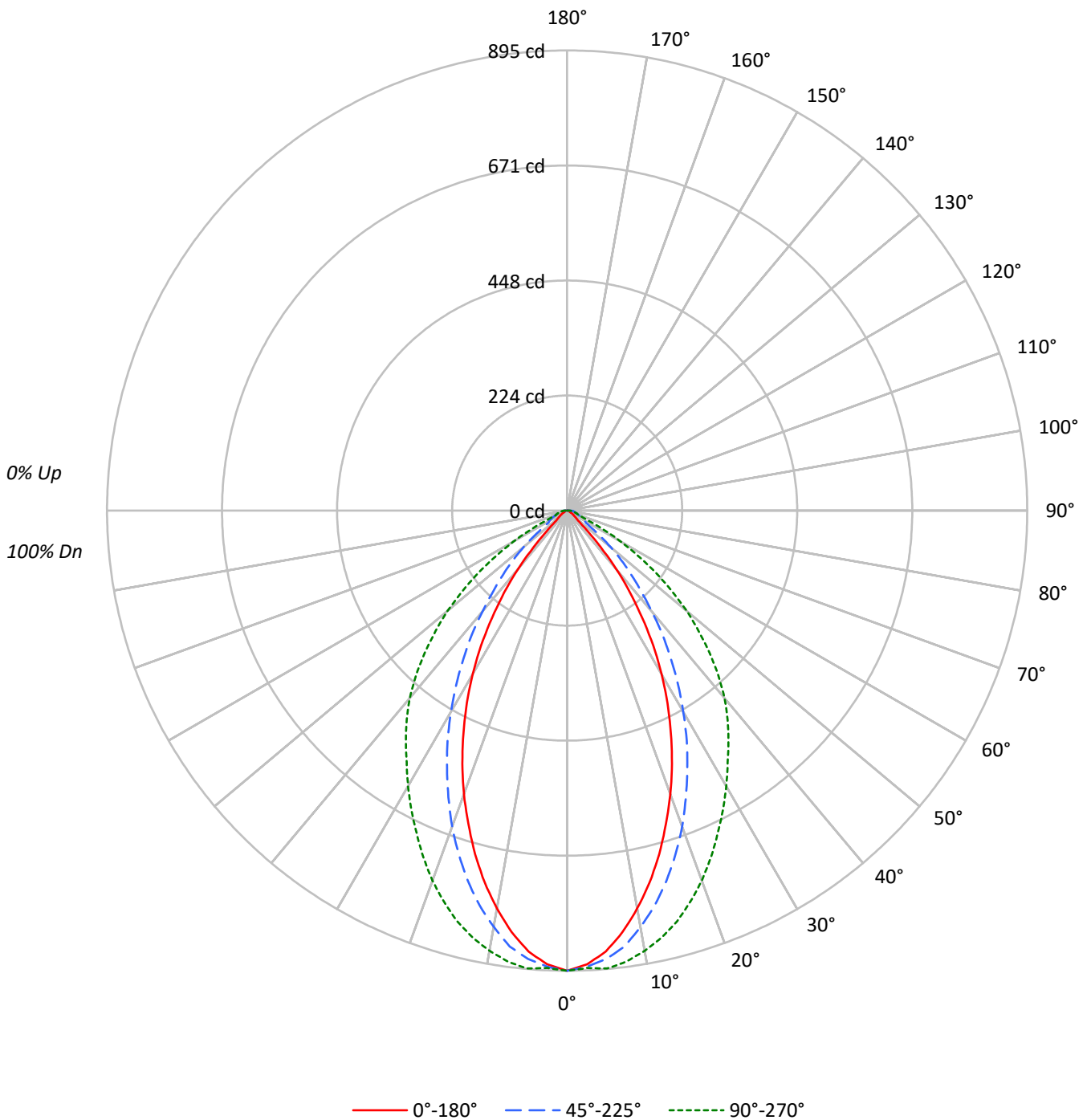
Lumens per Lamp: N/A
Luminaire Lumens: 1074.6 lumens
Efficiency: N/A
Efficacy: 25.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10511	10511	10511
5°	10149	10315	10537
10°	9368	9802	10364
15°	8408	9065	10051
20°	7334	8172	9568
25°	6187	7162	8976
30°	4976	6123	8389
35°	3642	5042	7840
40°	2272	3930	7301
45°	860	2929	6505
50°	407	2020	5544
55°	313	1108	4287
60°	221	939	2818
65°	164	817	1175
70°	161	766	766
75°	213	798	798
80°	318	953	872
85°	633	1590	1266

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6505 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.2	7.6
10°-20°	210.7	19.6
20°-30°	260.8	24.3
30°-40°	233.8	21.8
40°-50°	153.3	14.3
50°-60°	76.7	7.1
60°-70°	29.9	2.8
70°-80°	16.8	1.6
80°-90°	10.4	1.0
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°	553.6	51.5
0°-40°	787.4	73.3
0°-60°	1017.5	94.7
0°-90°	1074.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1074.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	895	895	895	895	895	
5°	861	875	875	884	894	80
15°	692	720	746	795	827	193
25°	478	507	553	632	693	218
35°	254	288	352	458	547	158
45°	52	84	176	302	392	49
55°	15	19	54	148	209	14
65°	6	18	29	39	42	6
75°	5	18	18	18	18	5
85°	5	12	12	12	9	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	895.1	895.1	895.1	895.1	895.1
2.5°	883.3	896.2	888.0	889.2	890.4
5°	861.0	875.1	875.1	884.5	893.9
7.5°	826.8	843.3	855.1	871.5	884.5
10°	785.7	805.7	822.1	851.5	869.2
12.5°	741.0	765.7	786.9	825.7	850.4
15°	691.6	719.8	745.7	795.1	826.8
17.5°	638.7	666.9	701.0	758.6	797.4
20°	586.9	615.1	654.0	718.6	765.7
22.5°	532.8	562.2	603.4	675.1	730.4
25°	477.5	506.9	552.8	631.6	692.8
27.5°	422.2	451.6	503.4	589.3	656.3
30°	367.0	396.4	451.6	543.4	618.7
32.5°	311.7	343.4	401.1	501.0	581.0
35°	254.1	288.2	351.7	457.5	546.9
37.5°	201.1	232.9	304.6	419.9	512.8
40°	148.2	182.3	256.4	383.4	476.3
42.5°	96.4	132.9	212.9	343.4	435.2
45°	51.8	83.5	176.4	302.3	391.7
47.5°	28.2	45.9	142.3	258.8	347.0
50°	22.3	25.9	110.6	221.1	303.5
52.5°	18.8	21.2	78.8	185.8	255.2
55°	15.3	18.8	54.1	148.2	209.4
57.5°	12.9	16.5	42.3	115.3	163.5
60°	9.4	14.1	40.0	84.7	120.0
62.5°	7.1	15.3	35.3	58.8	78.8
65°	5.9	17.6	29.4	38.8	42.3
67.5°	4.7	18.8	25.9	24.7	24.7
70°	4.7	17.6	22.3	21.2	22.3
72.5°	4.7	18.8	20.0	18.8	20.0
75°	4.7	17.6	17.6	17.6	17.6
77.5°	4.7	16.5	16.5	15.3	15.3
80°	4.7	14.1	14.1	14.1	12.9
82.5°	4.7	12.9	12.9	12.9	10.6
85°	4.7	11.8	11.8	11.8	9.4
87.5°	3.5	10.6	11.8	10.6	7.1
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	0.54	1.79	0.90	2.11	2.42	14.78	16.03	15.14	16.35	16.66
	3H	2.86	3.97	3.24	4.30	4.67	14.86	15.97	15.24	16.30	16.67
	4H	3.96	4.99	4.36	5.35	5.73	14.94	15.97	15.34	16.32	16.71
	6H	4.95	5.90	5.37	6.27	6.67	15.04	15.99	15.46	16.36	16.75
	8H	5.43	6.33	5.86	6.72	7.13	15.10	16.00	15.53	16.39	16.79
	12H	5.99	6.85	6.42	7.23	7.66	15.18	16.04	15.61	16.42	16.85
4H	2H	3.78	4.82	4.19	5.17	5.55	14.63	15.67	15.04	16.02	16.40
	3H	6.09	6.94	6.51	7.34	7.75	14.81	15.65	15.22	16.06	16.46
	4H	7.46	8.22	7.90	8.64	9.08	14.96	15.72	15.40	16.14	16.58
	6H	8.55	9.20	9.01	9.65	10.12	15.18	15.84	15.65	16.28	16.75
	8H	9.01	9.62	9.48	10.06	10.54	15.31	15.92	15.78	16.37	16.84
	12H	9.50	10.04	9.99	10.52	11.00	15.48	16.02	15.97	16.50	16.98
8H	4H	8.44	9.05	8.91	9.49	9.97	14.96	15.57	15.43	16.01	16.49
	6H	9.96	10.46	10.46	10.96	11.44	15.29	15.79	15.80	16.29	16.77
	8H	10.73	11.18	11.25	11.70	12.19	15.52	15.97	16.05	16.49	16.98
	12H	11.54	11.94	12.05	12.43	13.00	15.86	16.26	16.38	16.75	17.33
12H	4H	8.61	9.15	9.10	9.64	10.11	14.94	15.48	15.43	15.96	16.44
	6H	10.27	10.72	10.80	11.24	11.73	15.31	15.76	15.84	16.28	16.77
	8H	11.23	11.63	11.74	12.12	12.69	15.62	16.02	16.14	16.52	17.09