

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: P1059132

Luminaire Tested: S123RDR-S1165D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
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: S123RDR-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

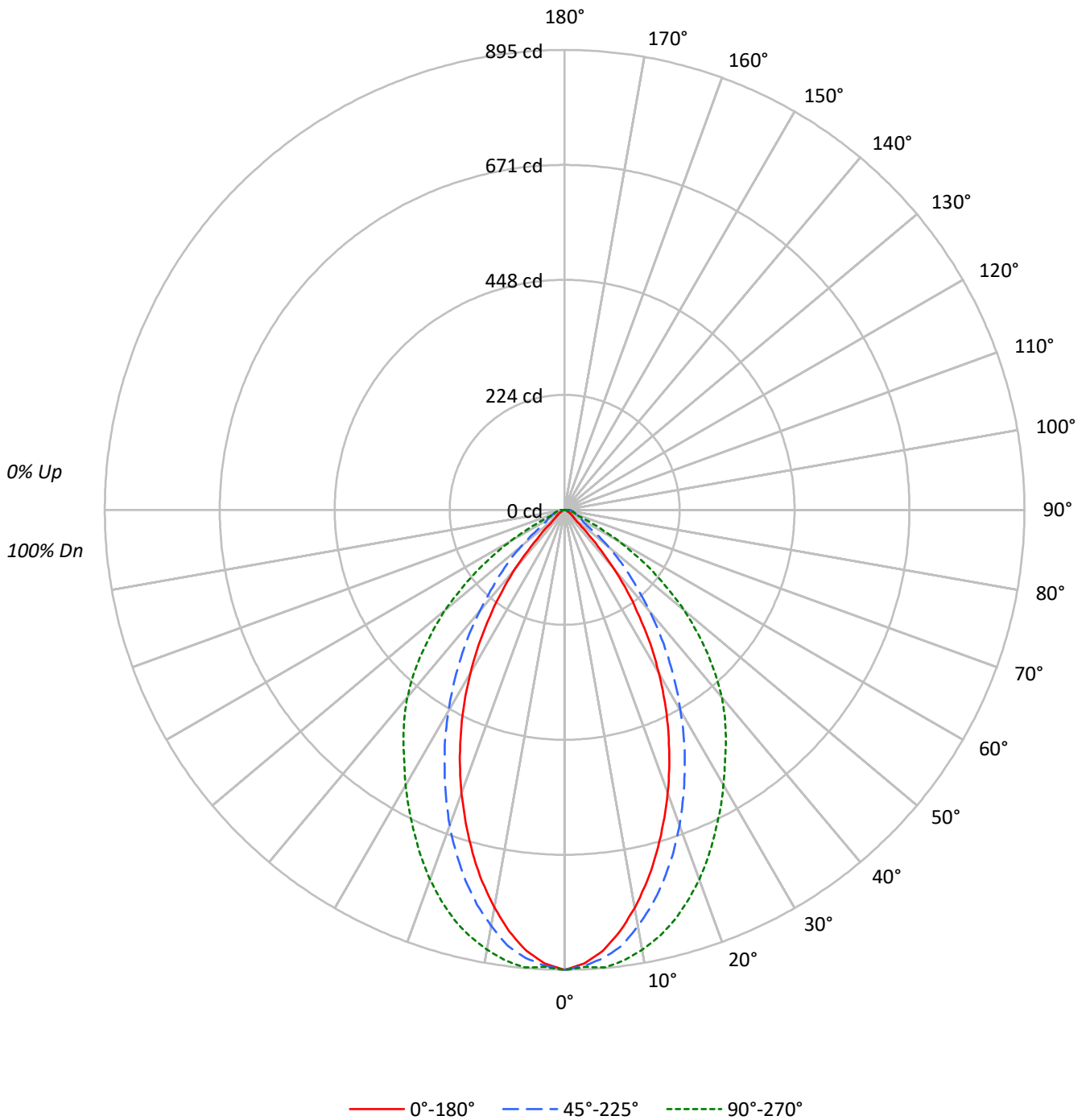
Lumens per Lamp: N/A
Luminaire Lumens: 1074.6 lumens
Efficiency: N/A
Efficacy: 25.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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

(END OF REPORT)