

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: P1060266

Luminaire Tested: S124RDR-S1020D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060266
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1020D930-X4F0-XX-UDD-BVL-W
Description: DEFINE 4 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

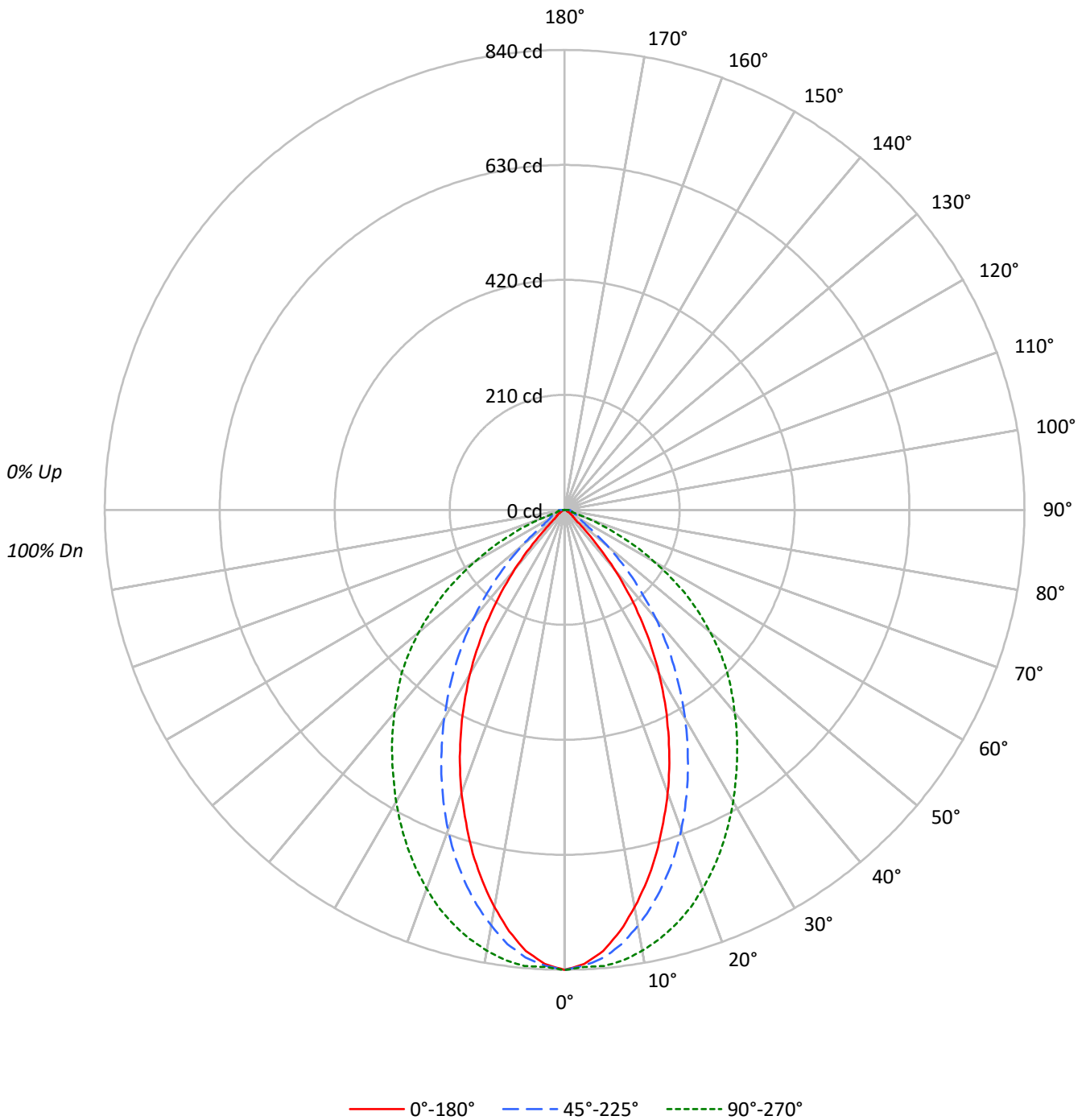
Lumens per Lamp: N/A
Luminaire Lumens: 1059.0 lumens
Efficiency: N/A
Efficacy: 30.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72				
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65				
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59				
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54				
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49				
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45				
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7236	7236	7236
5°	6991	7093	7230
10°	6443	6744	7149
15°	5786	6269	6990
20°	5044	5704	6752
25°	4255	5060	6457
30°	3432	4374	6119
35°	2540	3660	5775
40°	1575	2916	5433
45°	625	2126	5117
50°	277	1334	4651
55°	222	697	4072
60°	153	527	3245
65°	100	522	2231
70°	98	471	1042
75°	130	459	459
80°	193	536	536
85°	385	1067	781

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5117 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.1	7.3
10°-20°	198.9	18.8
20°-30°	251.1	23.7
30°-40°	230.4	21.8
40°-50°	156.9	14.8
50°-60°	85.5	8.1
60°-70°	37.0	3.5
70°-80°	13.5	1.3
80°-90°	8.7	0.8
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°	527.2	49.8
0°-40°	757.5	71.5
0°-60°	999.9	94.4
0°-90°	1059.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1059.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	840	840	840	840	840	
5°	809	820	821	830	836	75
15°	649	672	703	754	784	181
25°	448	479	533	617	680	205
35°	242	277	348	459	549	149
45°	51	86	175	310	420	48
55°	15	16	46	171	271	13
65°	5	7	26	53	110	6
75°	4	13	14	14	14	4
85°	4	9	11	11	8	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	840.3	840.3	840.3	840.3	840.3
2.5°	830.5	840.3	833.4	835.4	835.4
5°	808.8	819.6	820.6	829.5	836.4
7.5°	776.2	792.0	799.9	817.6	829.5
10°	736.8	755.5	771.3	801.9	817.6
12.5°	694.4	716.1	739.7	780.2	802.8
15°	649.0	671.7	703.2	753.5	784.1
17.5°	598.7	626.3	664.8	724.9	762.4
20°	550.4	578.0	622.4	690.4	736.8
22.5°	500.1	528.7	578.0	653.9	709.1
25°	447.8	479.3	532.6	617.4	679.6
27.5°	396.5	430.0	486.2	579.0	648.0
30°	345.2	378.7	439.9	539.5	615.4
32.5°	292.9	327.4	393.5	498.1	581.9
35°	241.6	277.1	348.2	458.6	549.4
37.5°	189.4	226.8	302.8	420.2	516.8
40°	140.1	177.5	259.4	381.7	483.3
42.5°	93.7	131.2	215.0	344.2	451.7
45°	51.3	85.8	174.6	309.7	420.2
47.5°	27.6	47.3	135.1	276.2	384.7
50°	20.7	25.6	99.6	240.7	347.2
52.5°	17.8	19.7	69.0	203.2	309.7
55°	14.8	15.8	46.4	170.6	271.2
57.5°	11.8	12.8	34.5	138.1	229.8
60°	8.9	10.8	30.6	106.5	188.4
62.5°	6.9	8.9	28.6	77.9	148.9
65°	4.9	6.9	25.6	53.3	109.5
67.5°	4.9	7.9	21.7	34.5	74.0
70°	3.9	10.8	18.7	22.7	41.4
72.5°	3.9	11.8	15.8	15.8	15.8
75°	3.9	12.8	13.8	13.8	13.8
77.5°	3.9	11.8	12.8	11.8	11.8
80°	3.9	10.8	10.8	10.8	10.8
82.5°	3.9	9.9	10.8	10.8	8.9
85°	3.9	8.9	10.8	10.8	7.9
87.5°	3.0	8.9	9.9	9.9	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)