

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: P1060614

Luminaire Tested: S124RDR-S795D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060614
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S795D940-X4F0-XX-UDD-WVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

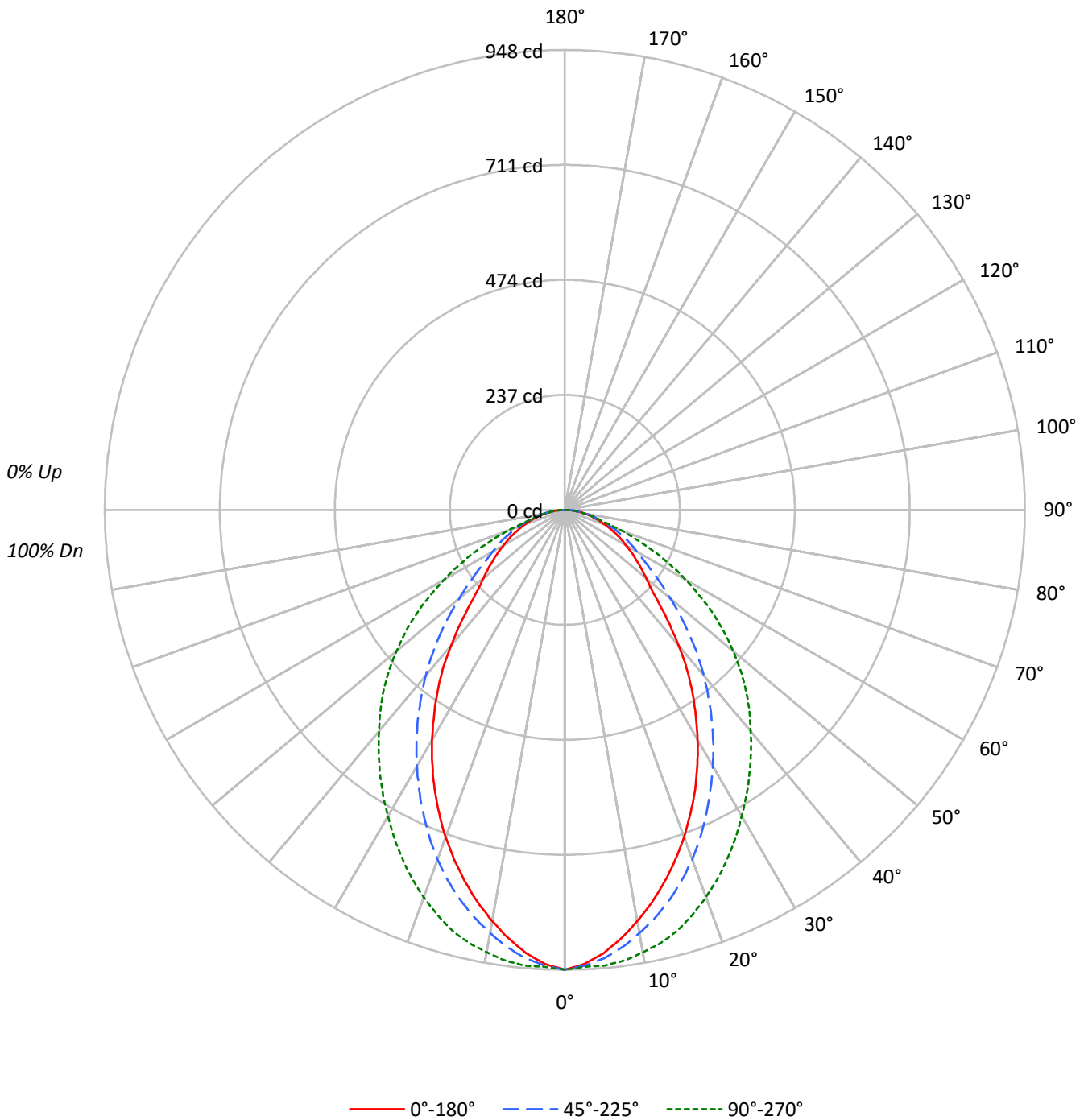
Lumens per Lamp: N/A
Luminaire Lumens: 1739.5 lumens
Efficiency: N/A
Efficacy: 67.4 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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				100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65				65
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57				57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50				50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45				45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40				40
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37				37
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33				33
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31				31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8163	8163	8163
5°	7926	8020	8150
10°	7526	7746	8099
15°	7075	7419	8002
20°	6581	7027	7787
25°	6034	6560	7533
30°	5439	6064	7249
35°	4815	5547	6976
40°	4093	5008	6695
45°	3351	4424	6436
50°	2934	3799	6058
55°	2695	3274	5604
60°	2499	2947	4941
65°	2341	2769	4136
70°	2195	2535	3104
75°	2066	2316	2262
80°	1914	2122	1914
85°	1739	2075	1660

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6436 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.6	5.0
10°-20°	235.7	13.6
20°-30°	322.2	18.5
30°-40°	338.6	19.5
40°-50°	293.9	16.9
50°-60°	221.7	12.7
60°-70°	143.7	8.3
70°-80°	73.8	4.2
80°-90°	22.3	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°	645.5	37.1
0°-40°	984.2	56.6
0°-60°	1499.7	86.2
0°-90°	1739.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1739.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	948	948	948	948	948	
5°	917	930	928	935	943	86
15°	794	813	832	870	898	222
25°	635	658	690	743	793	291
35°	458	483	528	598	664	285
45°	275	301	363	454	528	217
55°	180	185	218	310	373	162
65°	115	117	136	164	203	114
75°	62	70	70	70	68	66
85°	18	22	21	20	17	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	948.0	948.0	948.0	948.0	948.0
2.5°	937.1	948.8	940.4	942.1	942.9
5°	916.9	929.5	927.8	935.4	942.9
7.5°	890.9	906.0	909.4	924.5	937.1
10°	860.7	877.5	885.9	910.2	926.2
12.5°	828.9	845.6	860.7	891.8	914.4
15°	793.6	812.9	832.2	870.0	897.6
17.5°	756.7	776.8	801.2	842.3	875.0
20°	718.1	738.2	766.8	811.2	849.8
22.5°	677.0	699.7	729.9	777.7	823.0
25°	635.1	657.7	690.4	743.3	792.8
27.5°	591.4	614.9	650.2	708.9	761.7
30°	547.0	572.1	609.9	672.0	729.0
32.5°	501.7	528.5	568.8	635.1	697.1
35°	458.0	483.2	527.7	598.1	663.6
37.5°	412.7	437.9	485.7	562.1	630.0
40°	364.1	391.8	445.5	524.3	595.6
42.5°	318.8	346.5	404.4	488.3	562.9
45°	275.2	301.2	363.3	453.9	528.5
47.5°	241.6	260.1	322.1	420.3	491.6
50°	219.0	227.3	283.6	383.4	452.2
52.5°	198.8	205.5	248.3	346.5	413.6
55°	179.5	184.6	218.1	309.6	373.3
57.5°	162.8	165.3	191.3	272.6	329.7
60°	145.1	148.5	171.1	234.9	286.9
62.5°	130.9	132.5	153.5	198.8	244.1
65°	114.9	117.4	135.9	164.4	203.0
67.5°	100.7	104.9	117.4	134.2	160.2
70°	87.2	93.1	100.7	109.1	123.3
72.5°	74.7	81.4	85.6	88.9	86.4
75°	62.1	69.6	69.6	70.5	68.0
77.5°	50.3	57.0	56.2	55.4	52.0
80°	38.6	44.5	42.8	41.9	38.6
82.5°	28.5	32.7	31.0	30.2	26.0
85°	17.6	21.8	21.0	20.1	16.8
87.5°	8.4	12.6	11.7	10.9	7.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)