

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: P1056083

Luminaire Tested: S124R3DR-S795D940-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056083
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-9)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124R3DR-S795D940-X4F0-XX-UDD-FLL-S
Description: DEFINE 4, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

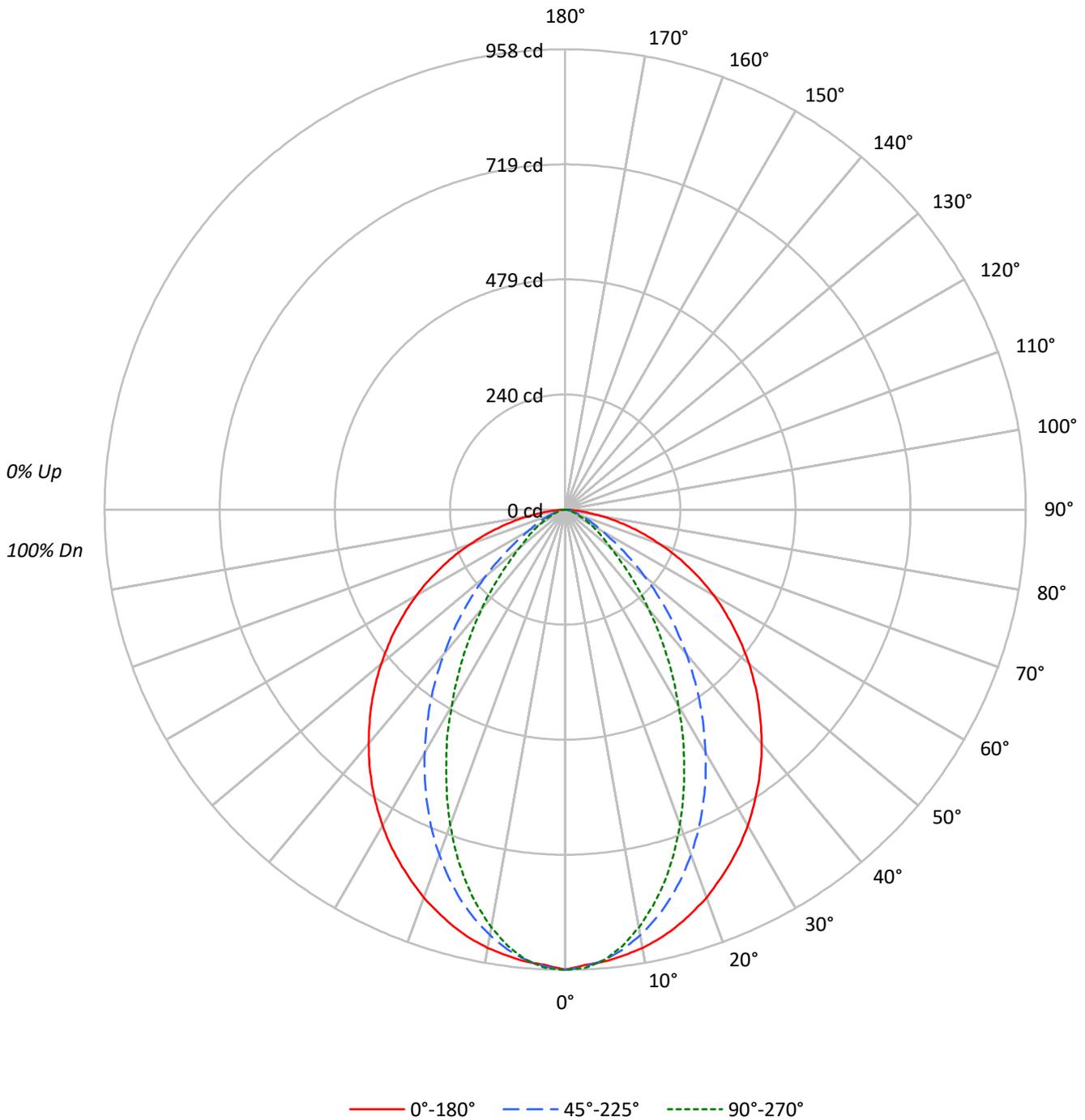
Lumens per Lamp: N/A
Luminaire Lumens: 1548.6 lumens
Efficiency: N/A
Efficacy: 58.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.87 / 1.03
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89				89
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78				78
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	71	66	62	60				60
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54				54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	48				48
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44				44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40				40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37				37
10	60	48	41	36	59	47	40	36	46	40	36	45	40	35	45	39	35	34				34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8467	8467	8467
5°	8381	8350	8350
10°	8318	8077	7926
15°	8220	7689	7330
20°	8088	7199	6569
25°	7924	6620	5707
30°	7756	5963	4806
35°	7555	5265	3956
40°	7338	4519	3119
45°	7113	3757	2331
50°	6869	2956	1704
55°	6597	2186	1361
60°	6307	1514	1042
65°	5933	1176	766
70°	5372	830	600
75°	4690	577	458
80°	3768	453	407
85°	2080	365	365

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7113 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.8	5.7
10°-20°	237.4	15.3
20°-30°	316.6	20.4
30°-40°	318.8	20.6
40°-50°	261.4	16.9
50°-60°	178.7	11.5
60°-70°	99.8	6.4
70°-80°	39.6	2.6
80°-90°	7.5	0.5
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°	642.8	41.5
0°-40°	961.5	62.1
0°-60°	1401.6	90.5
0°-90°	1548.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1548.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	958	958	958	958	958	
5°	944	955	941	936	941	90
15°	898	888	840	811	801	253
25°	812	772	679	610	585	374
35°	700	626	488	395	366	438
45°	569	465	300	211	186	439
55°	428	300	142	94	88	383
65°	284	143	56	40	37	280
75°	137	38	17	14	13	147
85°	20	4	4	4	4	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	957.7	957.7	957.7	957.7	957.7
2.5°	948.8	960.4	952.3	953.2	955.0
5°	944.3	955.0	940.8	936.3	940.8
7.5°	936.3	944.3	922.9	914.0	915.8
10°	926.5	929.2	899.7	884.6	882.8
12.5°	914.0	910.4	872.1	849.8	844.4
15°	898.0	888.1	840.0	810.6	800.8
17.5°	879.2	862.3	804.3	766.0	751.7
20°	859.6	834.6	765.1	716.0	698.2
22.5°	836.4	805.2	723.2	663.4	642.9
25°	812.3	772.2	678.6	609.9	585.0
27.5°	787.4	738.3	632.2	555.5	530.6
30°	759.7	701.8	584.1	501.1	470.8
32.5°	730.3	664.3	535.9	447.6	419.1
35°	700.0	626.0	487.8	395.0	366.5
37.5°	668.8	586.7	439.6	345.1	316.6
40°	635.8	546.6	391.5	297.8	270.2
42.5°	601.9	505.6	345.1	253.2	227.4
45°	568.9	464.6	300.5	211.3	186.4
47.5°	534.1	423.6	256.8	172.1	150.7
50°	499.4	382.5	214.9	138.2	123.9
52.5°	463.7	341.5	176.6	113.2	103.4
55°	428.0	300.5	141.8	94.5	88.3
57.5°	392.4	259.5	109.7	80.3	73.1
60°	356.7	219.4	85.6	65.1	58.9
62.5°	320.1	179.2	70.4	51.7	46.4
65°	283.6	142.7	56.2	40.1	36.6
67.5°	247.0	108.8	42.8	31.2	28.5
70°	207.8	77.6	32.1	24.1	23.2
72.5°	173.9	52.6	23.2	18.7	17.8
75°	137.3	37.5	16.9	14.3	13.4
77.5°	106.1	24.1	12.5	11.6	10.7
80°	74.0	13.4	8.9	8.0	8.0
82.5°	45.5	7.1	6.2	5.4	5.4
85°	20.5	3.6	3.6	3.6	3.6
87.5°	3.6	1.8	1.8	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)