

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: P1056084

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056084
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-7)
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-W
Description: DEFINE 4, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

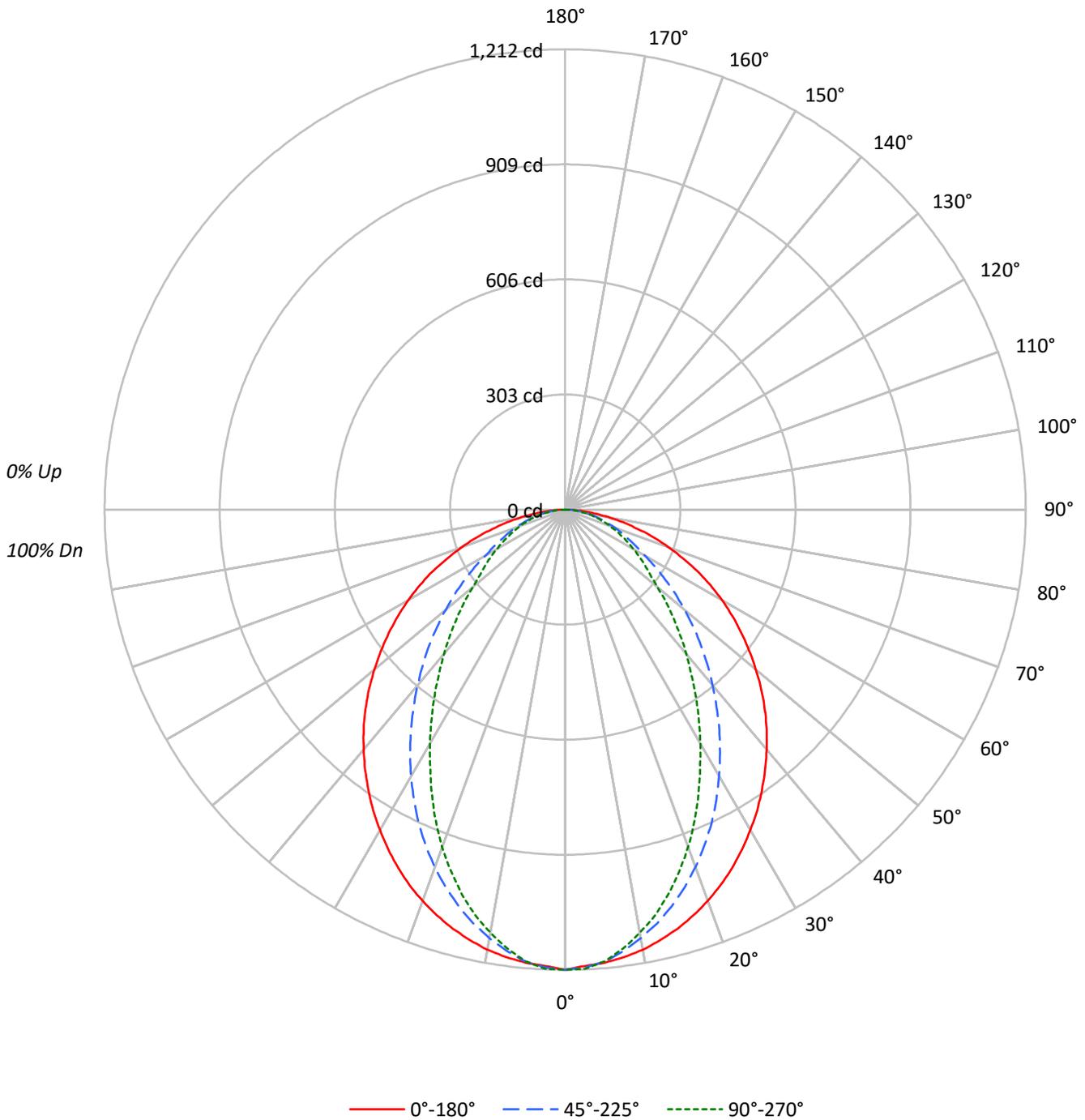
Lumens per Lamp: N/A
Luminaire Lumens: 2413.7 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.95 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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									
RC	80									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	110	105	102	98	107	103	100	97	99	96	93	95	93	91	92	90	88	86																			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	76	73																			
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63																			
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55																			
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49																			
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43																			
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39																			
8	64	51	43	38	62	51	43	38	49	42	37	48	42	37	47	41	37	35																			
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32																			
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10714	10714	10714
5°	10629	10605	10597
10°	10568	10287	10159
15°	10456	9900	9599
20°	10320	9430	8902
25°	10151	8890	8090
30°	9950	8276	7265
35°	9740	7632	6467
40°	9520	6968	5722
45°	9288	6322	5029
50°	9002	5642	4342
55°	8728	4962	3945
60°	8421	4258	3659
65°	8040	3862	3414
70°	7468	3573	3226
75°	6764	3290	3047
80°	5901	3040	2861
85°	4524	2800	2627

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9288 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.8	4.7
10°-20°	306.0	12.7
20°-30°	423.7	17.6
30°-40°	454.8	18.8
40°-50°	413.6	17.1
50°-60°	325.7	13.5
60°-70°	222.9	9.2
70°-80°	120.0	5.0
80°-90°	34.0	1.4
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°	842.6	34.9
0°-40°	1297.4	53.8
0°-60°	2036.8	84.4
0°-90°	2413.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2413.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1212	1212	1212	1212	1212	
5°	1198	1211	1195	1189	1194	114
15°	1142	1130	1082	1052	1049	322
25°	1041	998	911	845	829	479
35°	902	832	707	622	599	564
45°	743	648	506	418	402	573
55°	566	458	322	260	256	506
65°	384	275	185	164	163	379
75°	198	120	96	88	89	211
85°	45	30	28	26	26	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1211.8	1211.8	1211.8	1211.8	1211.8
2.5°	1202.9	1217.2	1206.5	1208.3	1210.1
5°	1197.6	1210.9	1194.9	1188.7	1194.0
7.5°	1188.7	1197.6	1172.6	1161.0	1166.4
10°	1177.1	1178.8	1145.8	1128.9	1131.6
12.5°	1161.0	1156.6	1116.4	1092.3	1094.1
15°	1142.3	1129.8	1081.6	1052.2	1048.7
17.5°	1120.9	1100.4	1043.3	1005.9	998.7
20°	1096.8	1069.2	1002.3	954.1	946.1
22.5°	1070.1	1034.4	957.7	900.6	889.0
25°	1040.6	997.8	911.3	845.3	829.3
27.5°	1008.5	958.6	861.4	789.2	768.7
30°	974.6	917.6	810.6	733.0	711.6
32.5°	939.9	875.7	758.8	676.8	654.5
35°	902.4	832.0	707.1	621.5	599.2
37.5°	864.1	786.5	654.5	568.0	544.8
40°	824.8	741.0	603.7	514.5	495.8
42.5°	784.7	694.6	553.8	464.6	447.6
45°	742.8	648.3	505.6	418.2	402.2
47.5°	700.0	601.0	456.6	374.5	359.4
50°	654.5	553.8	410.2	331.7	315.7
52.5°	610.8	505.6	365.6	289.8	281.8
55°	566.2	458.3	321.9	259.5	255.9
57.5°	521.7	411.1	281.8	235.4	231.8
60°	476.2	364.7	240.8	210.4	206.9
62.5°	430.7	319.2	210.4	186.4	184.6
65°	384.3	274.6	184.6	164.1	163.2
67.5°	335.3	231.8	161.4	144.5	143.6
70°	288.9	189.0	138.2	124.8	124.8
72.5°	245.2	149.8	116.8	106.1	106.1
75°	198.0	120.4	96.3	88.3	89.2
77.5°	156.0	94.5	77.6	72.2	72.2
80°	115.9	70.4	59.7	55.3	56.2
82.5°	78.5	49.0	42.8	40.1	40.1
85°	44.6	30.3	27.6	25.9	25.9
87.5°	16.1	14.3	13.4	11.6	12.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)