

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: P1056419

Luminaire Tested: S125R3DR-S375D840-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056419
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-12)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125R3DR-S375D840-X4F0-XX-UDD-FLL-S
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

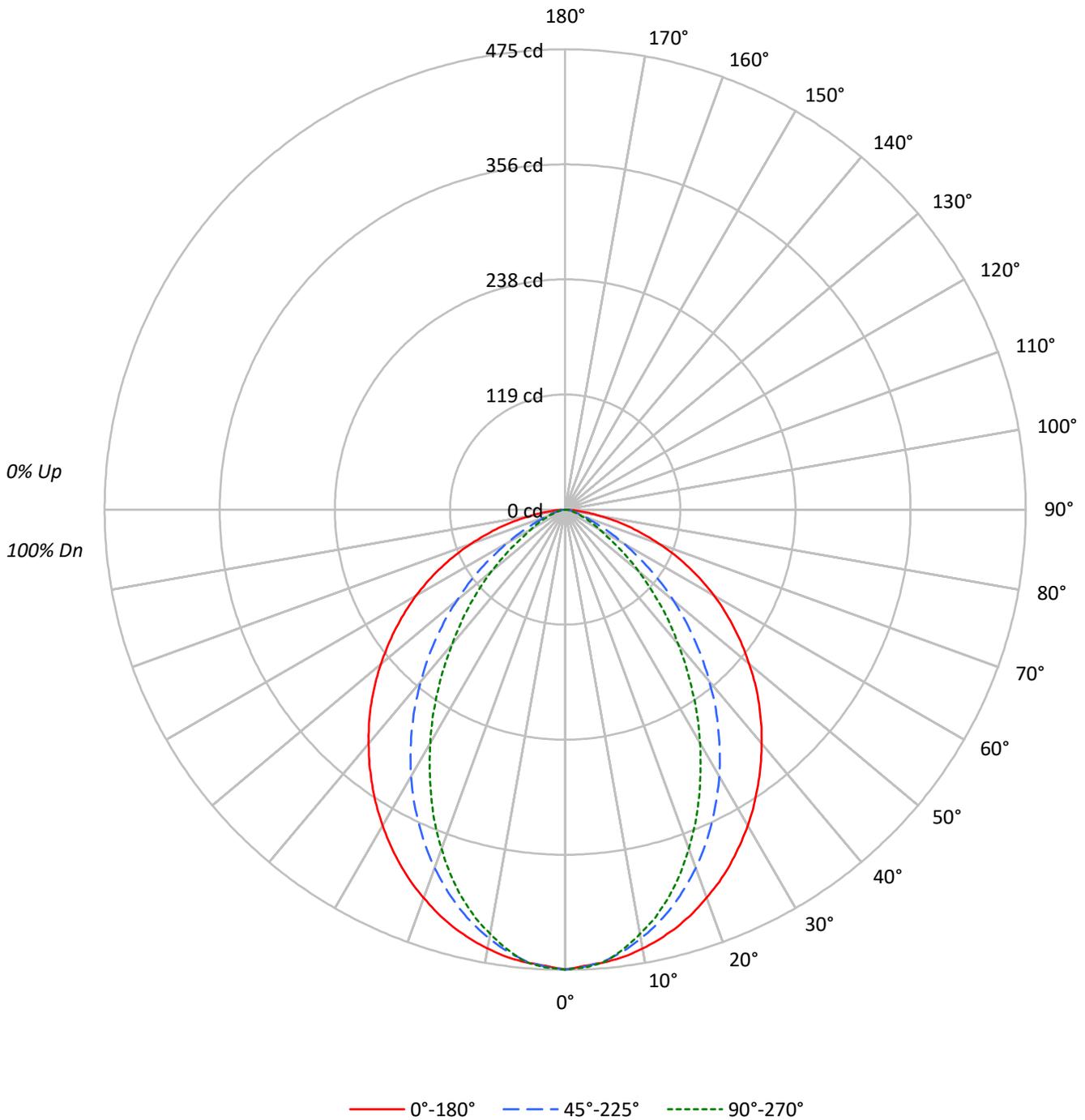
Lumens per Lamp: N/A
Luminaire Lumens: 858.0 lumens
Efficiency: N/A
Efficacy: 68.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 12.6
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3356	3356	3356
5°	3328	3319	3325
10°	3303	3228	3193
15°	3265	3110	3027
20°	3208	2963	2804
25°	3147	2788	2551
30°	3075	2594	2271
35°	2993	2375	1976
40°	2909	2134	1671
45°	2825	1881	1385
50°	2726	1600	1088
55°	2622	1300	791
60°	2504	970	566
65°	2354	639	442
70°	2127	444	308
75°	1849	287	240
80°	1449	216	195
85°	746	178	146

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2825 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.2	5.2
10°-20°	120.2	14.0
20°-30°	166.2	19.4
30°-40°	176.1	20.5
40°-50°	153.7	17.9
50°-60°	109.3	12.7
60°-70°	60.8	7.1
70°-80°	23.4	2.7
80°-90°	4.1	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°	330.7	38.5
0°-40°	506.8	59.1
0°-60°	769.8	89.7
0°-90°	858.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	858.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	475	475	475	475	475	
5°	469	472	468	466	469	45
15°	446	442	425	416	414	126
25°	404	390	357	335	327	186
35°	347	323	275	242	229	217
45°	283	249	188	150	138	218
55°	213	170	106	73	64	190
65°	141	92	38	28	26	139
75°	68	26	10	9	9	72
85°	9	3	2	2	2	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	474.7	474.7	474.7	474.7	474.7
2.5°	471.2	476.0	472.1	472.5	473.0
5°	469.0	472.5	467.7	466.4	468.6
7.5°	465.5	468.1	459.8	456.7	458.0
10°	460.2	461.1	449.7	445.3	444.8
12.5°	453.6	452.3	438.2	431.2	430.8
15°	446.1	442.2	425.0	415.8	413.6
17.5°	436.9	430.8	409.7	397.8	394.3
20°	426.4	418.0	393.8	378.5	372.7
22.5°	415.8	404.4	376.3	356.9	350.8
25°	403.5	389.9	357.4	335.4	327.0
27.5°	390.3	374.1	338.0	312.5	302.4
30°	376.7	357.8	317.8	289.2	278.2
32.5°	362.2	340.7	296.7	265.5	254.1
35°	346.8	323.1	275.2	241.8	229.0
37.5°	331.4	305.0	254.1	218.5	205.3
40°	315.2	286.6	231.2	194.7	181.1
42.5°	299.3	267.7	209.7	172.3	160.0
45°	282.6	248.8	188.1	150.3	138.5
47.5°	265.5	229.0	166.6	129.7	117.8
50°	247.9	209.7	145.5	109.4	98.9
52.5°	230.3	190.3	125.7	90.1	80.9
55°	212.7	170.5	105.5	73.0	64.2
57.5°	195.2	151.2	86.6	57.1	49.2
60°	177.1	131.4	68.6	42.2	40.0
62.5°	159.1	112.1	53.2	34.7	33.0
65°	140.7	92.3	38.2	28.1	26.4
67.5°	122.2	74.3	27.7	21.5	20.2
70°	102.9	56.7	21.5	16.3	14.9
72.5°	84.4	40.9	15.4	11.9	11.4
75°	67.7	26.4	10.5	8.8	8.8
77.5°	51.0	15.8	7.5	6.6	6.6
80°	35.6	9.2	5.3	4.8	4.8
82.5°	21.5	4.8	3.5	3.1	3.1
85°	9.2	2.6	2.2	1.8	1.8
87.5°	1.8	0.9	0.9	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)