

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: P1056420

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056420
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-10)
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-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

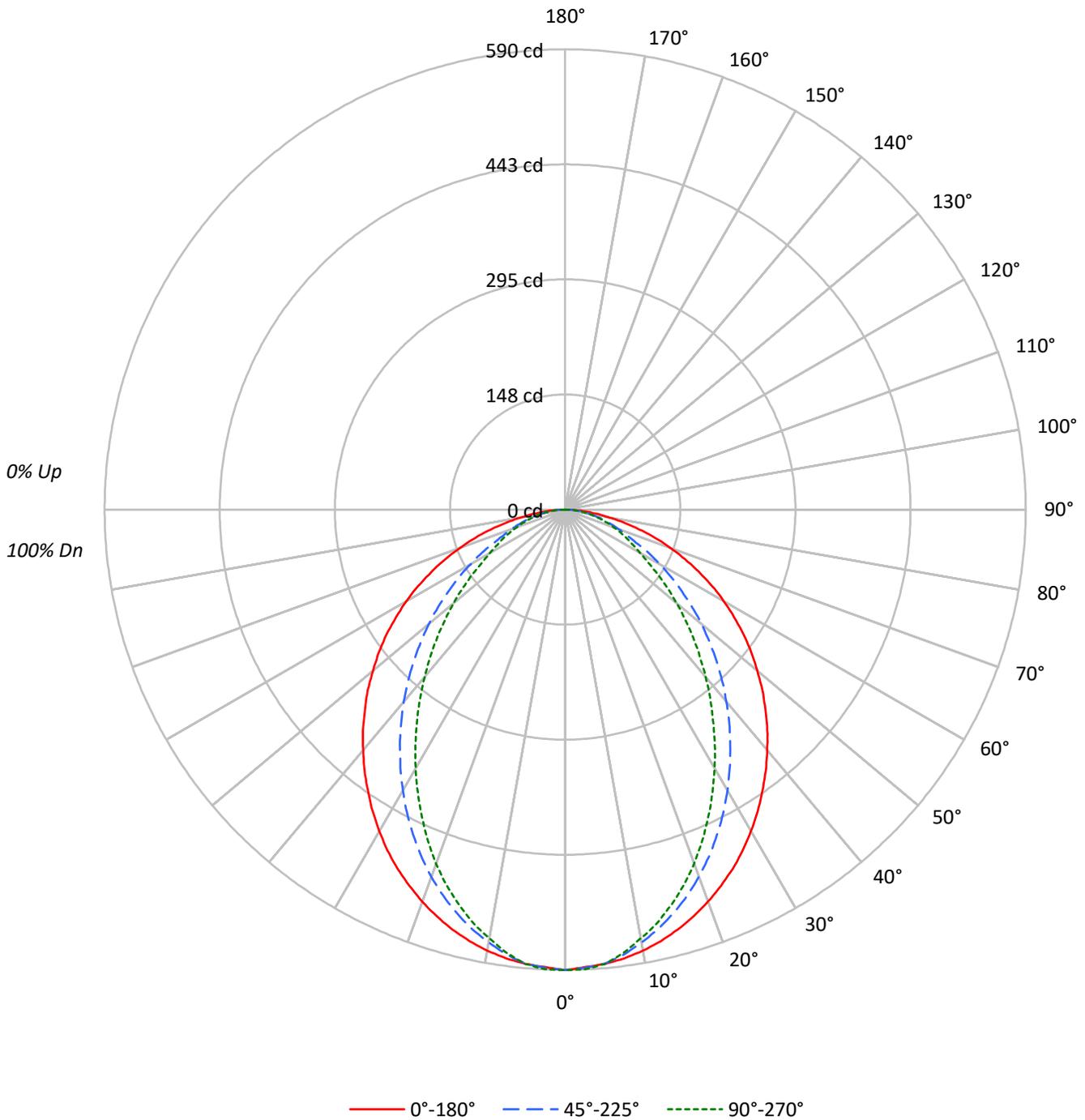
Lumens per Lamp: N/A
Luminaire Lumens: 1251.2 lumens
Efficiency: N/A
Efficacy: 99.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4173	4173	4173
5°	4149	4146	4149
10°	4121	4045	4007
15°	4079	3921	3841
20°	4024	3770	3634
25°	3963	3590	3388
30°	3886	3394	3126
35°	3801	3183	2852
40°	3715	2965	2584
45°	3625	2737	2315
50°	3529	2504	2050
55°	3440	2248	1782
60°	3318	1977	1567
65°	3155	1676	1455
70°	2962	1499	1362
75°	2677	1379	1284
80°	2325	1254	1201
85°	1817	1103	1103

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3625 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.2	4.4
10°-20°	151.7	12.1
20°-30°	214.2	17.1
30°-40°	235.8	18.8
40°-50°	220.0	17.6
50°-60°	175.6	14.0
60°-70°	118.2	9.4
70°-80°	62.9	5.0
80°-90°	17.5	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°	421.1	33.7
0°-40°	657.0	52.5
0°-60°	1052.5	84.1
0°-90°	1251.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1251.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	590	590	590	590	590	
5°	585	589	584	582	585	55
15°	557	554	536	527	525	157
25°	508	493	460	440	434	234
35°	440	414	369	340	330	276
45°	363	328	274	240	232	280
55°	279	237	182	153	145	249
65°	189	147	100	89	87	187
75°	98	65	50	48	47	104
85°	22	15	14	14	14	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	590.3	590.3	590.3	590.3	590.3
2.5°	587.2	592.1	588.1	589.0	589.9
5°	584.6	589.4	584.2	582.4	584.6
7.5°	580.2	584.2	575.4	571.4	573.2
10°	574.1	576.7	563.5	558.2	558.2
12.5°	566.6	566.6	550.8	543.3	543.3
15°	557.4	554.3	535.8	526.6	524.8
17.5°	546.8	541.1	519.1	507.2	505.0
20°	534.9	525.7	501.1	485.7	483.1
22.5°	521.7	509.9	481.3	462.4	459.3
25°	508.1	492.7	460.2	440.0	434.3
27.5°	492.7	474.3	438.7	415.8	408.8
30°	476.0	454.9	415.8	390.3	382.9
32.5°	458.9	435.2	392.5	365.3	356.9
35°	440.4	414.5	368.8	339.8	330.5
37.5°	422.0	393.8	345.5	315.2	305.5
40°	402.6	371.9	321.3	290.1	280.0
42.5°	383.3	350.3	297.6	265.9	255.4
45°	362.6	328.3	273.8	240.4	231.6
47.5°	342.9	305.9	250.5	218.0	208.3
50°	320.9	282.6	227.7	195.2	186.4
52.5°	300.7	259.8	204.8	174.5	165.3
55°	279.1	236.9	182.4	153.4	144.6
57.5°	256.7	214.1	160.9	133.6	125.3
60°	234.7	191.2	139.8	114.7	110.8
62.5°	212.3	169.7	120.0	100.7	98.0
65°	188.6	147.3	100.2	88.8	87.0
67.5°	166.2	125.7	84.4	77.8	76.0
70°	143.3	104.2	72.5	66.8	65.9
72.5°	120.9	83.5	61.1	57.1	56.3
75°	98.0	65.1	50.5	47.5	47.0
77.5°	76.9	48.8	40.0	38.7	37.8
80°	57.1	36.5	30.8	29.9	29.5
82.5°	39.1	25.1	22.0	22.0	21.1
85°	22.4	15.4	13.6	14.1	13.6
87.5°	8.4	6.6	6.2	6.6	6.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)