

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: P1055659

Luminaire Tested: S123R3DR-S775D835-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055659
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-5)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DR-S775D835-X4F0-XX-UDD-FLL-B
Description: DEFINE 3, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

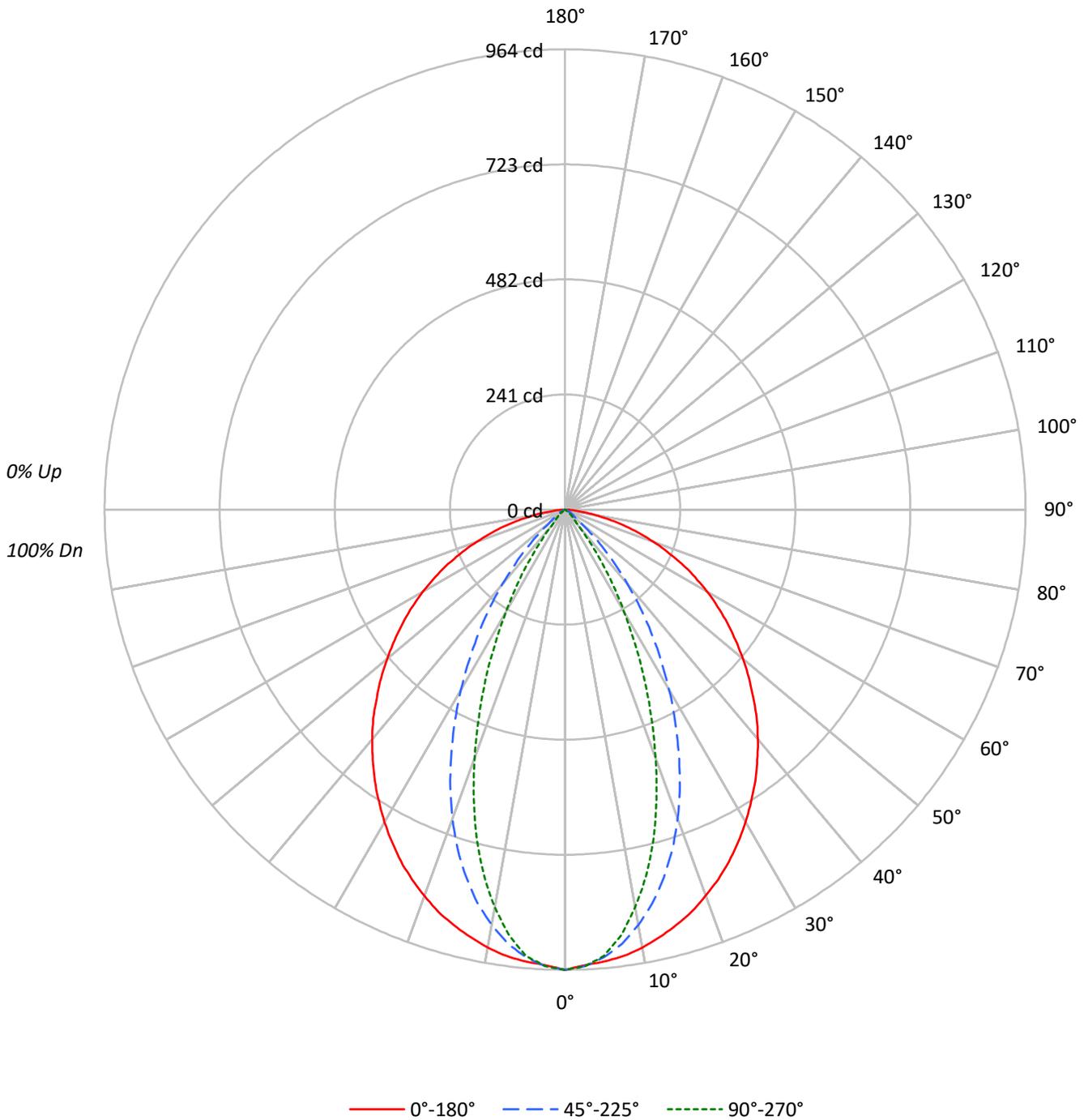
Lumens per Lamp: N/A
Luminaire Lumens: 1128.3 lumens
Efficiency: N/A
Efficacy: 42.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.7 / 0.86
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

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				
1	112	108	105	103	109	106	104	101	102	100	98	98	97	95	95	93	92	90				
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81				
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73				
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65				
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59				
6	81	70	63	58	79	69	62	57	67	61	57	66	61	56	64	60	56	54				
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50				
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46				
9	68	56	49	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43				
10	64	53	46	42	63	52	46	42	51	46	41	51	45	41	50	45	41	40				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11622	11622	11622
5°	11497	11388	11352
10°	11410	10810	10357
15°	11246	9960	8924
20°	11047	8840	7108
25°	10815	7489	5241
30°	10525	6070	3439
35°	10214	4622	1884
40°	9884	3195	645
45°	9497	1858	375
50°	9116	732	225
55°	8723	462	105
60°	8271	289	48
65°	7703	143	29
70°	6909	71	35
75°	5869	47	47
80°	4374	69	0
85°	1660	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9497 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.4	7.8
10°-20°	224.3	19.9
20°-30°	267.6	23.7
30°-40°	226.9	20.1
40°-50°	154.3	13.7
50°-60°	95.6	8.5
60°-70°	48.4	4.3
70°-80°	19.7	1.8
80°-90°	3.0	0.3
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°	580.2	51.4
0°-40°	807.2	71.5
0°-60°	1057.0	93.7
0°-90°	1128.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1128.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	964	964	964	964	964	
5°	950	959	941	934	938	90
15°	901	878	798	735	715	254
25°	813	737	563	435	394	374
35°	694	557	314	169	128	434
45°	557	365	109	27	22	430
55°	415	184	22	8	5	371
65°	270	45	5	1	1	267
75°	126	8	1	1	1	134
85°	12	0	0	1	0	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	964	964	964	964	964
2.5°	955	968	957	956	957
5°	950	959	941	934	938
7.5°	943	947	917	899	899
10°	932	929	883	853	846
12.5°	917	905	845	798	785
15°	901	878	798	735	715
17.5°	883	848	747	665	636
20°	861	814	689	589	554
22.5°	838	777	628	511	472
25°	813	737	563	435	394
27.5°	785	695	499	362	317
30°	756	651	436	292	247
32.5°	725	605	373	228	186
35°	694	557	314	169	128
37.5°	661	509	257	117	81
40°	628	462	203	74	41
42.5°	594	413	154	37	28
45°	557	365	109	27	22
47.5°	522	319	72	22	17
50°	486	273	39	16	12
52.5°	450	229	28	12	8
55°	415	184	22	8	5
57.5°	379	145	17	5	3
60°	343	107	12	3	2
62.5°	307	74	8	2	1
65°	270	45	5	1	1
67.5°	232	31	3	1	1
70°	196	22	2	1	1
72.5°	160	14	1	1	0
75°	126	8	1	1	1
77.5°	93	3	1	1	0
80°	63	1	1	1	0
82.5°	35	0	1	1	0
85°	12	0	0	1	0
87.5°	0	0	0	1	0
90°	0	0	0	0	0

(END OF REPORT)