

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: P1055660

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

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055660  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-6)  
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-S  
Description: DEFINE 3, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

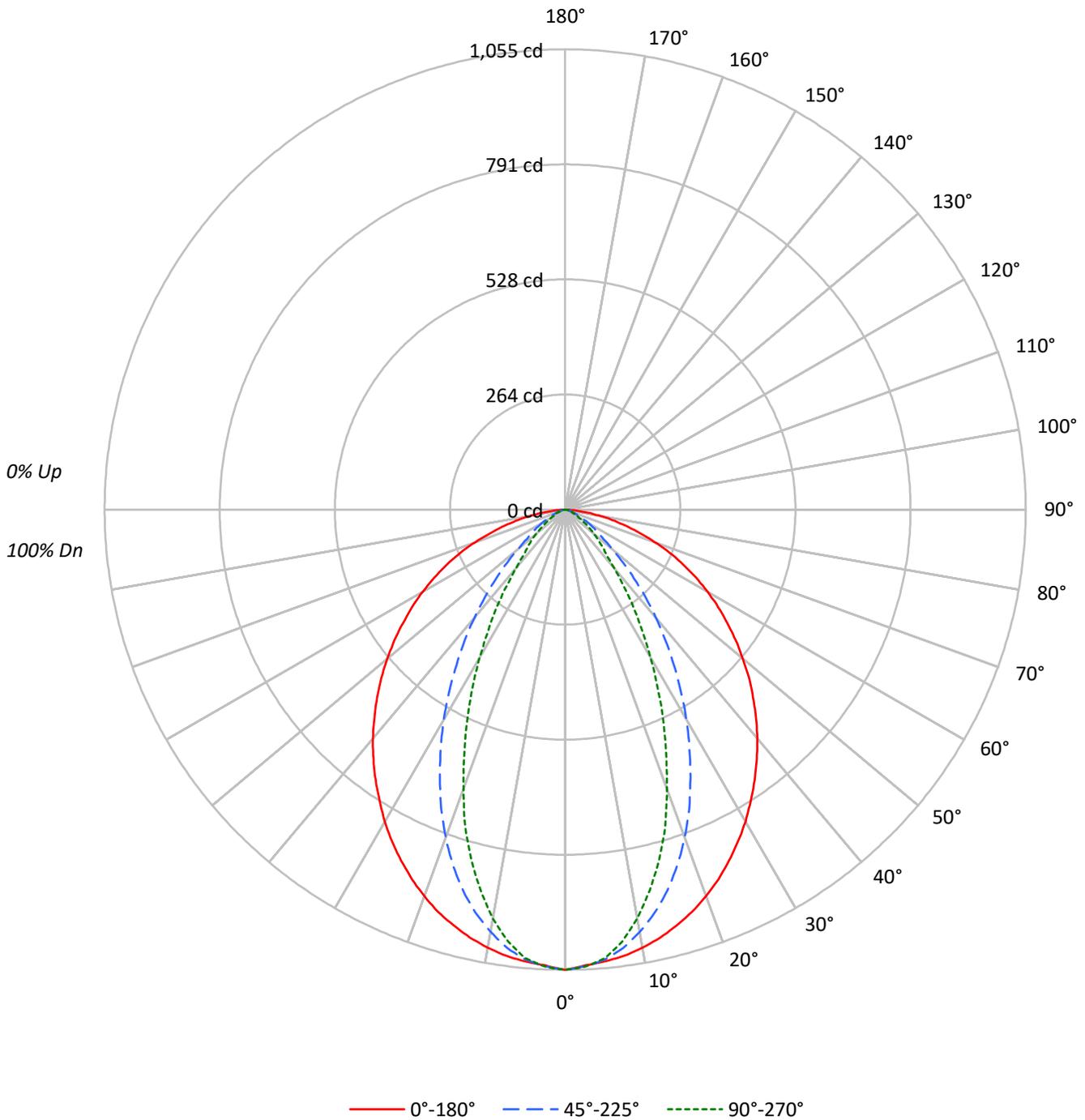
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1467.2 lumens  
Efficiency: N/A  
Efficacy: 55.6 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 0.77 / 0.94  
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				100
1	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	80	76	84	78	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56				56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39				39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36				36

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	12720	12720	12720
5°	12587	12538	12502
10°	12487	12034	11655
15°	12319	11283	10372
20°	12099	10264	8737
25°	11813	9033	7050
30°	11499	7740	5429
35°	11142	6388	4018
40°	10781	5084	2739
45°	10384	3802	2063
50°	9960	2645	1613
55°	9522	1934	1177
60°	9066	1447	844
65°	8530	970	656
70°	7720	705	529
75°	6661	512	419
80°	5346	417	347
85°	2767	415	277

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10384 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.5	6.6
10°-20°	253.9	17.3
20°-30°	318.9	21.7
30°-40°	297.1	20.2
40°-50°	227.4	15.5
50°-60°	151.1	10.3
60°-70°	81.5	5.6
70°-80°	33.4	2.3
80°-90°	6.4	0.4
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°	670.3	45.7
0°-40°	967.4	65.9
0°-60°	1345.9	91.7
0°-90°	1467.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1467.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1055	1055	1055	1055	1055	
5°	1040	1051	1036	1032	1033	99
15°	987	971	904	851	831	278
25°	888	828	679	566	530	409
35°	757	645	434	307	273	473
45°	609	450	223	131	121	470
55°	453	262	92	64	56	406
65°	299	101	34	25	23	295
75°	143	24	11	10	9	153
85°	20	3	3	3	2	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1055	1055	1055	1055	1055
2.5°	1046	1059	1048	1049	1049
5°	1040	1051	1036	1032	1033
7.5°	1032	1039	1014	1001	999
10°	1020	1022	983	960	952
12.5°	1005	998	947	909	894
15°	987	971	904	851	831
17.5°	967	940	855	786	762
20°	943	905	800	714	681
22.5°	917	868	742	640	603
25°	888	828	679	566	530
27.5°	858	785	617	496	459
30°	826	741	556	428	390
32.5°	791	693	493	365	327
35°	757	645	434	307	273
37.5°	721	597	377	256	218
40°	685	548	323	206	174
42.5°	647	499	272	164	139
45°	609	450	223	131	121
47.5°	571	401	180	113	103
50°	531	354	141	96	86
52.5°	493	307	110	79	70
55°	453	262	92	64	56
57.5°	416	216	76	50	44
60°	376	175	60	39	35
62.5°	338	137	46	31	28
65°	299	101	34	25	23
67.5°	260	73	26	20	19
70°	219	55	20	16	15
72.5°	180	39	15	13	12
75°	143	24	11	10	9
77.5°	110	14	8	8	7
80°	77	8	6	6	5
82.5°	47	5	4	4	4
85°	20	3	3	3	2
87.5°	3	1	1	1	1
90°	0	0	0	0	0

(END OF REPORT)