

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: P1055661

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055661
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-4)
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-W
Description: DEFINE 3, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

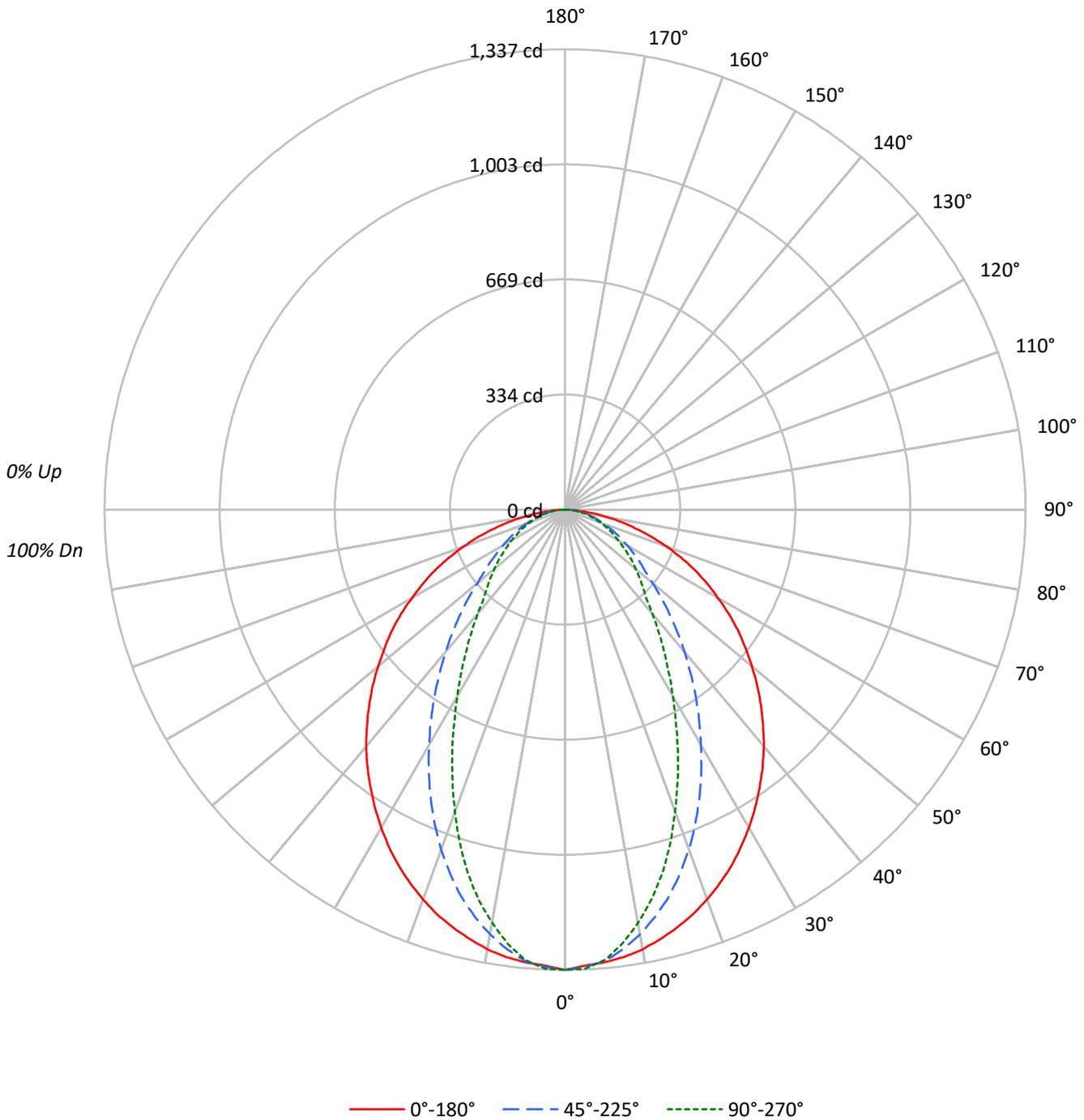
Lumens per Lamp: N/A
Luminaire Lumens: 2344.9 lumens
Efficiency: N/A
Efficacy: 88.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.83 / 1.02
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	83	79	76	74
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57
5	80	68	60	54	78	67	60	54	65	58	53	63	57	53	62	56	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16119	16119	16119
5°	15975	15939	15903
10°	15878	15340	14923
15°	15690	14529	13630
20°	15460	13484	11983
25°	15192	12278	10310
30°	14854	10984	8715
35°	14497	9714	7359
40°	14133	8483	6185
45°	13708	7315	5456
50°	13280	6227	5008
55°	12885	5549	4624
60°	12346	5015	4316
65°	11839	4593	4051
70°	11033	4230	3807
75°	9875	3913	3587
80°	8470	3610	3333
85°	5948	3320	3182

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13708 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.9	5.3
10°-20°	327.9	14.0
20°-30°	432.0	18.4
30°-40°	438.4	18.7
40°-50°	381.1	16.3
50°-60°	298.6	12.7
60°-70°	202.8	8.7
70°-80°	109.9	4.7
80°-90°	30.3	1.3
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°	883.8	37.7
0°-40°	1322.2	56.4
0°-60°	2001.8	85.4
0°-90°	2344.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2344.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1337	1337	1337	1337	1337	
5°	1320	1336	1317	1305	1314	125
15°	1257	1239	1164	1107	1092	354
25°	1142	1073	923	808	775	526
35°	985	868	660	534	500	616
45°	804	645	429	331	320	620
55°	613	426	264	225	220	547
65°	415	230	161	144	142	410
75°	212	106	84	78	77	226
85°	43	26	24	22	23	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1337	1337	1337	1337	1337
2.5°	1326	1343	1330	1331	1335
5°	1320	1336	1317	1305	1314
7.5°	1311	1323	1288	1269	1272
10°	1297	1301	1253	1223	1219
12.5°	1278	1271	1211	1167	1160
15°	1257	1239	1164	1107	1092
17.5°	1233	1203	1109	1039	1016
20°	1205	1163	1051	962	934
22.5°	1175	1121	988	883	854
25°	1142	1073	923	808	775
27.5°	1106	1025	857	734	697
30°	1067	975	789	662	626
32.5°	1027	922	724	595	560
35°	985	868	660	534	500
37.5°	942	813	598	476	444
40°	898	757	539	422	393
42.5°	851	701	482	371	349
45°	804	645	429	331	320
47.5°	757	588	379	303	293
50°	708	533	332	277	267
52.5°	660	479	293	252	245
55°	613	426	264	225	220
57.5°	564	374	235	204	198
60°	512	324	208	182	179
62.5°	465	277	184	163	160
65°	415	230	161	144	142
67.5°	364	191	140	126	125
70°	313	161	120	109	108
72.5°	263	133	101	94	92
75°	212	106	84	78	77
77.5°	166	82	67	63	62
80°	122	61	52	49	48
82.5°	80	42	37	35	35
85°	43	26	24	22	23
87.5°	15	11	11	10	11
90°	0	0	0	0	0

(END OF REPORT)