

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: P1056471

Luminaire Tested: S125R3DR-S850D835-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056471
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-S850D835-X4F0-XX-UDD-FLL-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

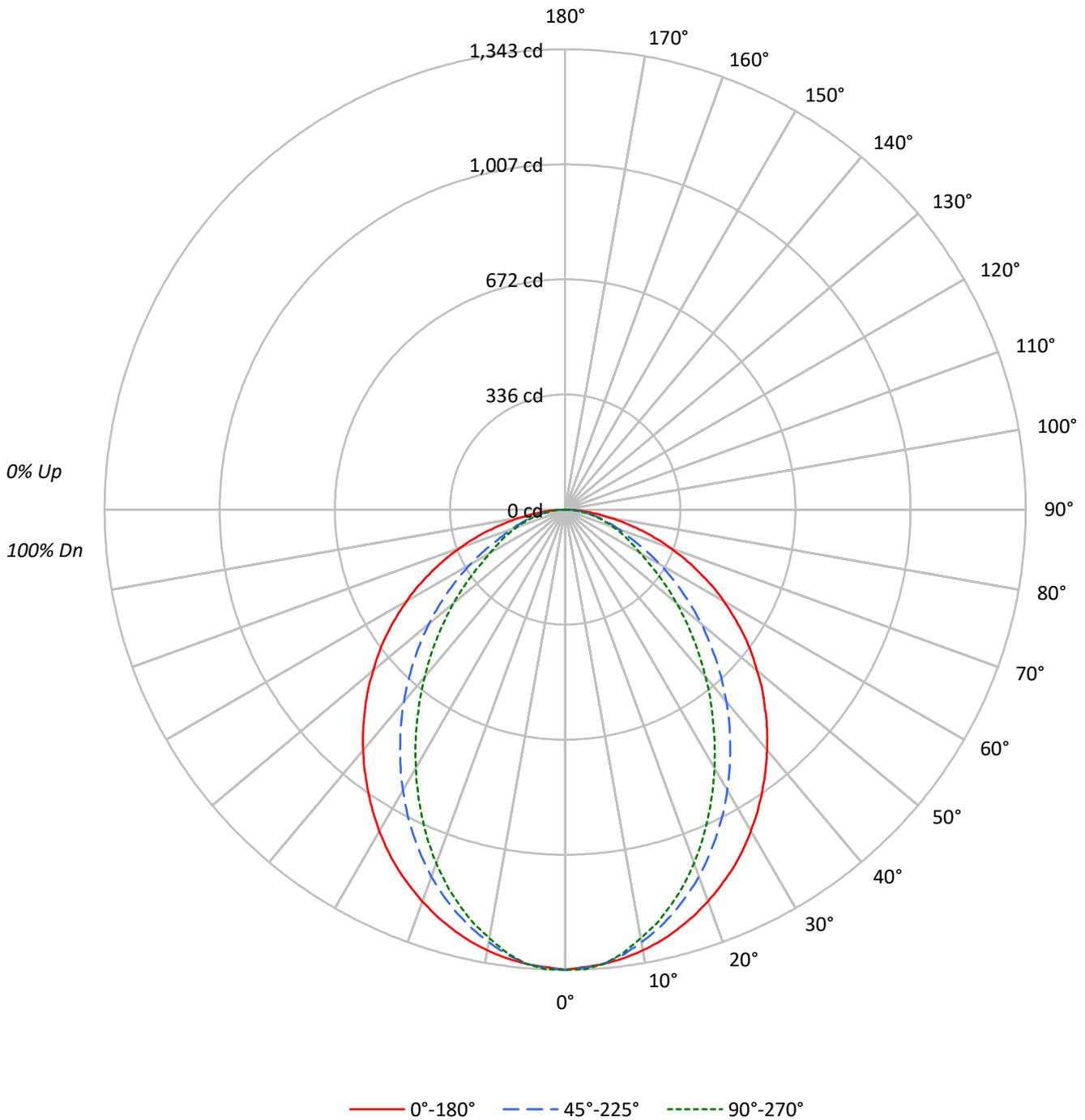
Lumens per Lamp: N/A
Luminaire Lumens: 2846.5 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9494	9494	9494
5°	9438	9431	9438
10°	9375	9203	9117
15°	9280	8922	8739
20°	9156	8576	8268
25°	9017	8167	7707
30°	8840	7722	7110
35°	8647	7241	6490
40°	8453	6746	5878
45°	8248	6228	5269
50°	8028	5697	4663
55°	7826	5115	4055
60°	7550	4496	3563
65°	7176	3814	3312
70°	6738	3410	3100
75°	6091	3141	2923
80°	5292	2850	2728
85°	4137	2514	2514

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8248 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.7	4.4
10°-20°	345.0	12.1
20°-30°	487.4	17.1
30°-40°	536.5	18.8
40°-50°	500.5	17.6
50°-60°	399.5	14.0
60°-70°	268.9	9.4
70°-80°	143.2	5.0
80°-90°	39.8	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°	958.1	33.7
0°-40°	1494.6	52.5
0°-60°	2394.6	84.1
0°-90°	2846.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2846.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1343	1343	1343	1343	1343	
5°	1330	1341	1329	1325	1330	126
15°	1268	1261	1219	1198	1194	357
25°	1156	1121	1047	1001	988	532
35°	1002	943	839	773	752	627
45°	825	747	623	547	527	637
55°	635	539	415	349	329	567
65°	429	335	228	202	198	426
75°	223	148	115	108	107	238
85°	51	35	31	32	31	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1343	1343	1343	1343	1343
2.5°	1336	1347	1338	1340	1342
5°	1330	1341	1329	1325	1330
7.5°	1320	1329	1309	1300	1304
10°	1306	1312	1282	1270	1270
12.5°	1289	1289	1253	1236	1236
15°	1268	1261	1219	1198	1194
17.5°	1244	1231	1181	1154	1149
20°	1217	1196	1140	1105	1099
22.5°	1187	1160	1095	1052	1045
25°	1156	1121	1047	1001	988
27.5°	1121	1079	998	946	930
30°	1083	1035	946	888	871
32.5°	1044	990	893	831	812
35°	1002	943	839	773	752
37.5°	960	896	786	717	695
40°	916	846	731	660	637
42.5°	872	797	677	605	581
45°	825	747	623	547	527
47.5°	780	696	570	496	474
50°	730	643	518	444	424
52.5°	684	591	466	397	376
55°	635	539	415	349	329
57.5°	584	487	366	304	285
60°	534	435	318	261	252
62.5°	483	386	273	229	223
65°	429	335	228	202	198
67.5°	378	286	192	177	173
70°	326	237	165	152	150
72.5°	275	190	139	130	128
75°	223	148	115	108	107
77.5°	175	111	91	88	86
80°	130	83	70	68	67
82.5°	89	57	50	50	48
85°	51	35	31	32	31
87.5°	19	15	14	15	15
90°	0	0	0	0	0

(END OF REPORT)