

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 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: S125R3DRP-S850D835-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
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: S125R3DRP-S850D835-X4F0-XX-UDD-F-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

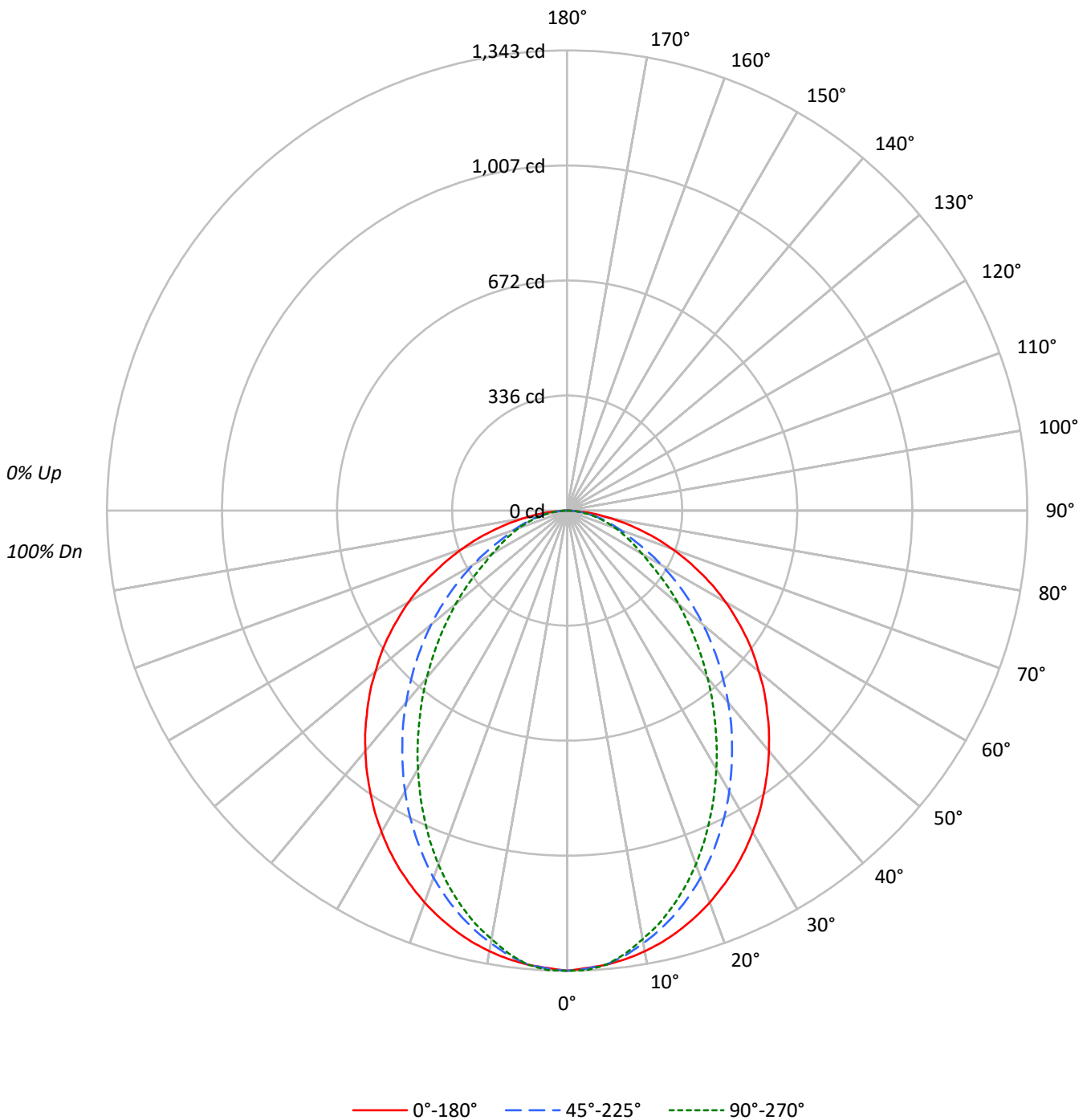
Lumens per Lamp: N/A
Luminaire Lumens: 2846.5 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (A_{in}): 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°	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



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	19.11	20.65	19.47	20.96	21.28	15.49	17.03	15.86	17.34	17.66
	3H	20.89	22.28	21.27	22.60	22.97	16.97	18.35	17.34	18.68	19.04
	4H	21.55	22.85	21.95	23.19	23.57	17.56	18.86	17.96	19.20	19.58
	6H	22.02	23.22	22.44	23.59	23.98	18.02	19.22	18.43	19.59	19.98
	8H	22.18	23.32	22.60	23.71	24.11	18.18	19.32	18.61	19.71	20.11
	12H	22.27	23.37	22.70	23.75	24.18	18.29	19.39	18.72	19.77	20.20
4H	2H	19.24	20.54	19.64	20.89	21.27	16.17	17.47	16.57	17.81	18.19
	3H	21.21	22.29	21.62	22.69	23.09	17.84	18.92	18.25	19.32	19.72
	4H	21.96	22.93	22.39	23.35	23.78	18.55	19.52	18.98	19.94	20.37
	6H	22.55	23.40	23.01	23.84	24.30	19.13	19.98	19.59	20.42	20.88
	8H	22.76	23.55	23.22	24.00	24.46	19.34	20.13	19.80	20.58	21.04
	12H	22.91	23.62	23.39	24.09	24.56	19.50	20.21	19.98	20.69	21.16
8H	4H	22.02	22.81	22.48	23.26	23.72	18.91	19.70	19.37	20.15	20.61
	6H	22.68	23.34	23.18	23.83	24.30	19.61	20.27	20.11	20.76	21.24
	8H	22.93	23.52	23.45	24.03	24.52	19.90	20.49	20.41	21.00	21.48
	12H	23.14	23.66	23.65	24.16	24.72	20.14	20.66	20.65	21.15	21.72
12H	4H	22.01	22.72	22.50	23.20	23.67	18.96	19.67	19.44	20.15	20.62
	6H	22.67	23.27	23.19	23.77	24.26	19.68	20.27	20.20	20.78	21.27
	8H	22.97	23.49	23.48	23.98	24.55	20.03	20.55	20.54	21.04	21.60