

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P242793

Luminaire Tested: **S125DR-S1090D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P242793  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125DR-S1090D935-X4F0-XX-UDD-F-W  
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3612.2 lumens  
Efficiency: N/A  
Efficacy: 103.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3  
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')  
CIE Type: Direct

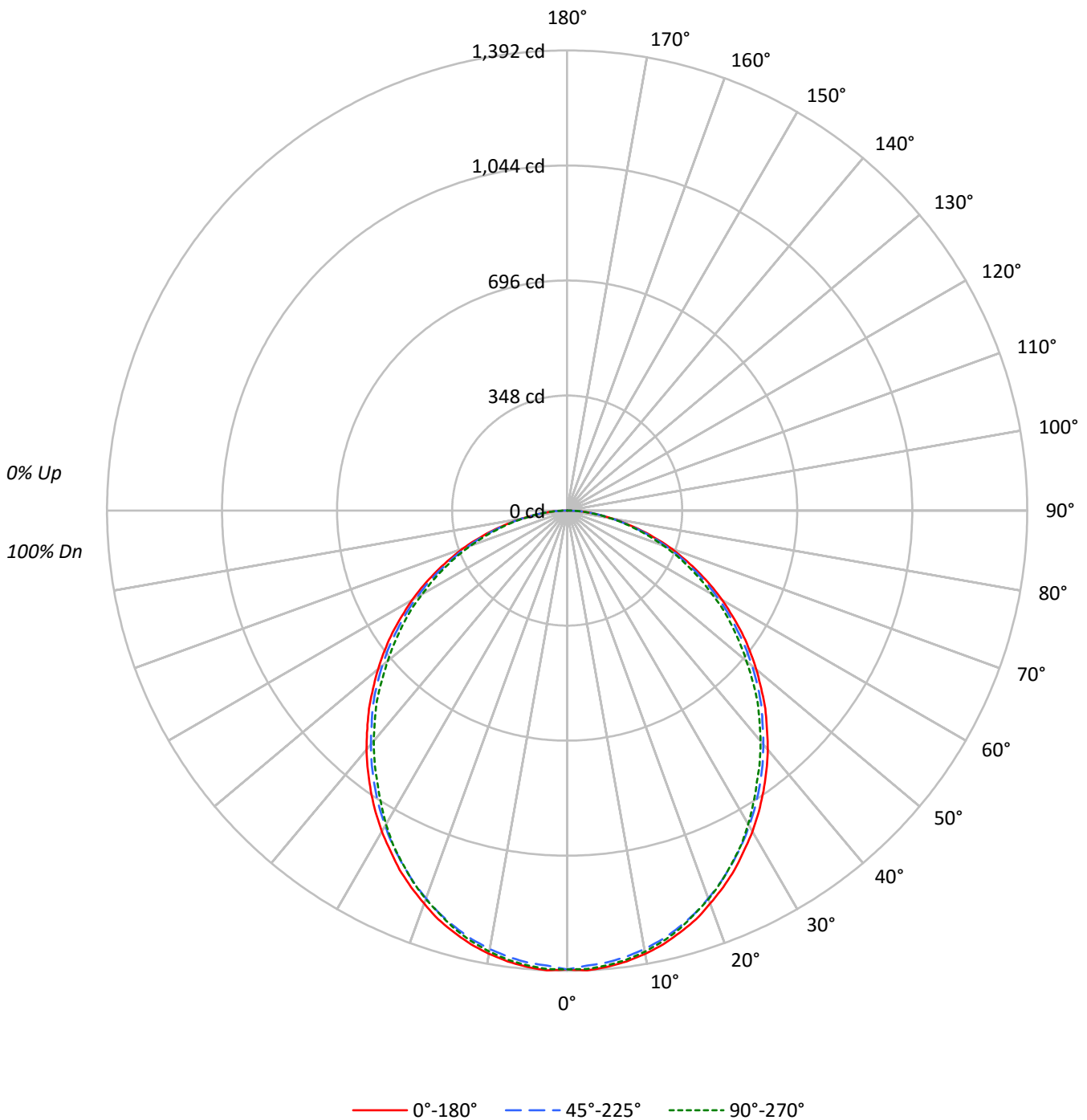
Input Watts (W): 34.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	9864	9864	9864
5°	9886	9792	9855
10°	9826	9723	9778
15°	9719	9606	9646
20°	9567	9442	9459
25°	9403	9247	9239
30°	9200	9038	8993
35°	8984	8812	8689
40°	8761	8567	8445
45°	8519	8344	8178
50°	8255	8074	7831
55°	8000	7769	7551
60°	7694	7460	7195
65°	7331	7090	6851
70°	6982	6662	6434
75°	6363	6151	5940
80°	5661	5575	5440
85°	4925	5015	4746



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.0	3.6
10°-20°	369.9	10.2
20°-30°	546.1	15.1
30°-40°	637.2	17.6
40°-50°	639.9	17.7
50°-60°	561.8	15.6
60°-70°	418.4	11.6
70°-80°	239.0	6.6
80°-90°	69.0	1.9
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°	1047.0	29.0
0°-40°	1684.2	46.6
0°-60°	2885.9	79.9
0°-90°	3612.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3612.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1388	1388	1388	1388	1388	
5°	1386	1384	1372	1382	1381	131
15°	1321	1318	1306	1311	1311	372
25°	1199	1194	1179	1181	1178	552
35°	1035	1031	1016	1010	1001	648
45°	848	843	830	817	814	653
55°	646	642	627	617	609	576
65°	436	434	422	412	407	432
75°	232	230	224	221	216	247
85°	60	62	62	60	58	70
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1387.9	1387.9	1387.9	1387.9	1387.9
2.5°	1392.2	1389.0	1378.0	1389.0	1387.9
5°	1385.7	1383.5	1372.5	1382.4	1381.3
7.5°	1375.8	1373.6	1361.5	1371.4	1370.3
10°	1361.5	1359.3	1347.2	1356.0	1354.9
12.5°	1343.9	1339.5	1328.6	1335.2	1335.2
15°	1320.9	1317.6	1305.5	1311.0	1311.0
17.5°	1296.7	1291.2	1279.2	1285.7	1280.3
20°	1264.9	1262.7	1248.4	1256.1	1250.6
22.5°	1233.0	1228.6	1215.5	1219.9	1216.6
25°	1199.0	1193.5	1179.2	1181.4	1178.1
27.5°	1159.5	1156.2	1141.9	1143.0	1139.7
30°	1121.0	1117.8	1101.3	1099.1	1095.8
32.5°	1079.3	1073.8	1059.6	1055.2	1048.6
35°	1035.4	1031.0	1015.6	1010.1	1001.4
37.5°	990.4	984.9	970.6	962.9	957.4
40°	944.3	938.8	923.4	913.5	910.2
42.5°	894.9	890.5	875.1	866.3	860.8
45°	847.6	843.3	830.1	816.9	813.6
47.5°	796.0	797.1	780.7	767.5	759.8
50°	746.6	743.3	730.2	715.9	708.2
52.5°	696.1	693.9	679.7	667.6	658.8
55°	645.6	642.3	627.0	617.1	609.4
57.5°	591.8	590.7	577.5	564.4	561.1
60°	541.3	536.9	524.8	513.9	506.2
62.5°	488.6	485.3	475.4	463.4	457.9
65°	435.9	433.7	421.6	411.7	407.4
67.5°	384.3	379.9	371.1	362.3	360.1
70°	336.0	330.5	320.6	314.0	309.6
72.5°	283.3	280.0	274.5	266.8	262.4
75°	231.7	229.5	224.0	220.7	216.3
77.5°	183.4	182.3	179.0	176.8	173.5
80°	138.3	138.3	136.2	135.1	132.9
82.5°	98.8	96.6	96.6	94.4	94.4
85°	60.4	61.5	61.5	60.4	58.2
87.5°	29.6	29.6	28.5	28.5	26.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)