

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: P242891

Luminaire Tested: **S125RDR-S1090D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P242891  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S1090D930-X4F0-XX-UDD-F-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3252.3 lumens  
Efficiency: N/A  
Efficacy: 93.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')  
CIE Type: Direct

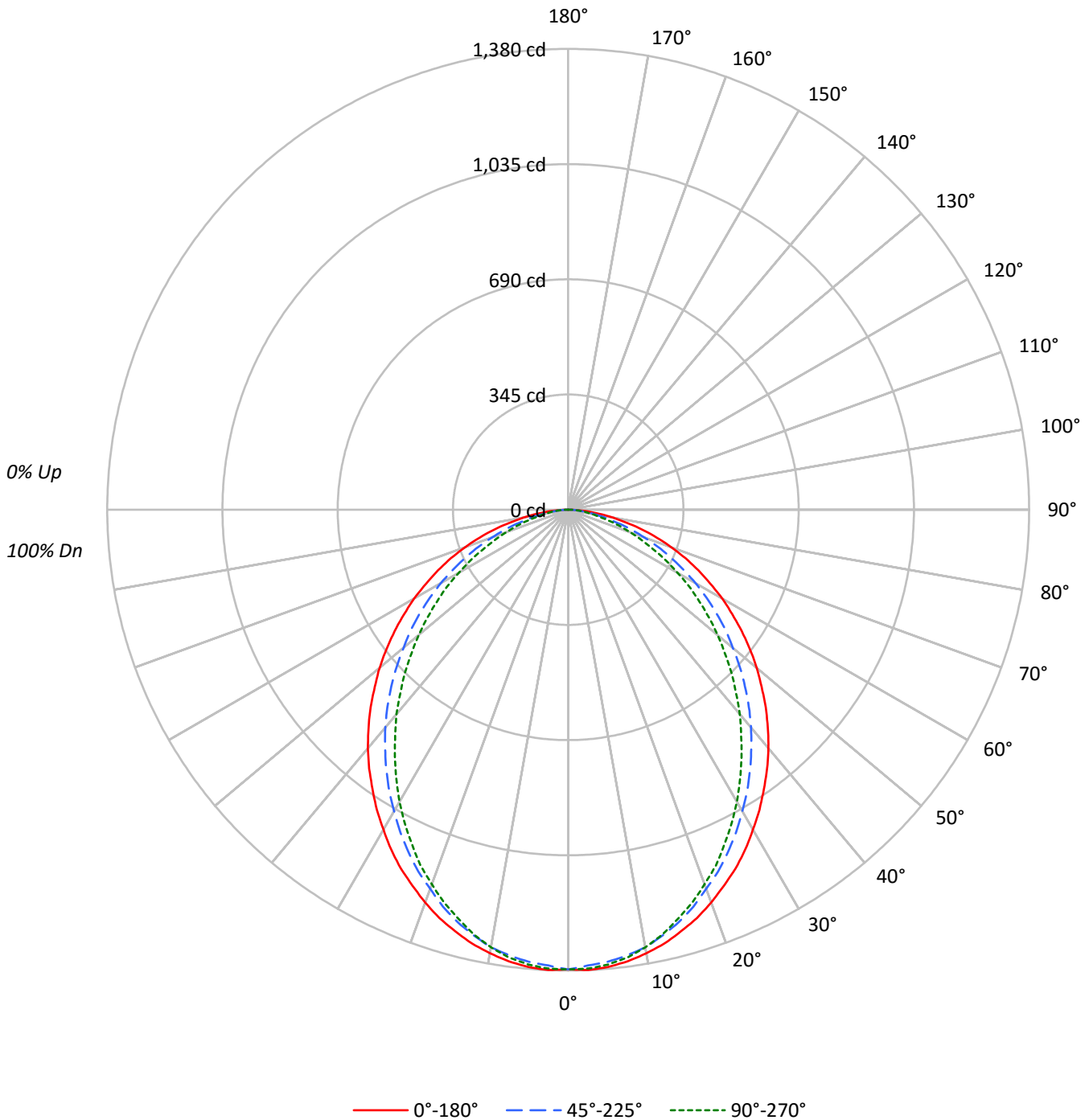
Input Watts (W): 34.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	98	90	84	79	87	82	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61
4	84	73	64	58	82	71	64	57	69	62	57	67	61	56	64	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34	33
9	58	45	37	32	57	45	37	32	44	37	32	42	36	31	41	36	31	29
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27

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

	0°	45°	90°
0°	9784	9784	9784
5°	9806	9695	9754
10°	9732	9604	9604
15°	9616	9409	9333
20°	9468	9137	9028
25°	9295	8871	8675
30°	9078	8558	8286
35°	8859	8237	7848
40°	8653	7900	7418
45°	8402	7524	6949
50°	8151	7116	6461
55°	7859	6725	5939
60°	7566	6252	5380
65°	7221	5699	4739
70°	6826	5012	4083
75°	6280	4226	3397
80°	5534	3319	2853
85°	4665	2716	2544



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.6	4.0
10°-20°	362.1	11.1
20°-30°	525.0	16.1
30°-40°	598.1	18.4
40°-50°	583.0	17.9
50°-60°	490.6	15.1
60°-70°	343.8	10.6
70°-80°	176.2	5.4
80°-90°	44.0	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°	1016.6	31.3
0°-40°	1614.7	49.6
0°-60°	2688.3	82.7
0°-90°	3252.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3252.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1377	1377	1377	1377	1377	
5°	1374	1370	1359	1369	1367	130
15°	1307	1301	1279	1278	1268	369
25°	1185	1170	1131	1118	1106	545
35°	1021	996	949	919	904	639
45°	836	806	749	707	691	645
55°	634	601	543	496	479	567
65°	429	394	339	297	282	425
75°	229	198	154	131	124	242
85°	57	38	33	32	31	66
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1376.6	1376.6	1376.6	1376.6	1376.6
2.5°	1379.7	1376.6	1366.2	1376.6	1375.5
5°	1374.5	1370.3	1358.9	1369.3	1367.2
7.5°	1364.1	1359.9	1346.4	1354.7	1352.7
10°	1348.5	1345.4	1330.8	1333.9	1330.8
12.5°	1330.8	1326.7	1305.9	1308.0	1302.8
15°	1306.9	1300.7	1278.8	1277.8	1268.4
17.5°	1282.0	1272.6	1246.6	1241.4	1234.1
20°	1251.8	1241.4	1208.1	1202.9	1193.6
22.5°	1218.5	1208.1	1172.8	1161.4	1154.1
25°	1185.3	1169.7	1131.2	1117.7	1106.2
27.5°	1147.8	1129.1	1088.6	1070.9	1059.5
30°	1106.2	1086.5	1042.8	1018.9	1009.6
32.5°	1065.7	1041.8	997.1	970.0	957.6
35°	1021.0	996.0	949.3	919.1	904.5
37.5°	978.4	948.2	900.4	865.0	850.5
40°	932.6	901.4	851.5	812.0	799.5
42.5°	884.8	852.6	800.6	763.1	743.4
45°	835.9	805.8	748.6	707.0	691.4
47.5°	785.0	753.8	696.6	654.0	636.3
50°	737.2	702.8	643.6	599.9	584.3
52.5°	685.2	649.8	594.7	546.9	531.3
55°	634.2	601.0	542.7	495.9	479.3
57.5°	582.2	546.9	490.7	445.0	430.4
60°	532.3	495.9	439.8	394.0	378.5
62.5°	479.3	445.0	387.8	346.2	330.6
65°	429.4	394.0	338.9	297.4	281.8
67.5°	379.5	344.1	291.1	251.6	239.1
70°	328.5	293.2	241.2	209.0	196.5
72.5°	278.6	244.3	196.5	167.4	160.1
75°	228.7	197.5	153.9	131.0	123.7
77.5°	177.8	152.8	116.4	98.8	92.5
80°	135.2	110.2	81.1	71.7	69.7
82.5°	93.6	71.7	54.1	50.9	49.9
85°	57.2	38.5	33.3	32.2	31.2
87.5°	23.9	16.6	15.6	15.6	14.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)