

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: P243751

Luminaire Tested: **S125RDR-H1090D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243751  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-66)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H1090D930-X4F0-XX-UDD-F-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3280.4 lumens  
Efficiency: N/A  
Efficacy: 104.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26  
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')  
CIE Type: Direct

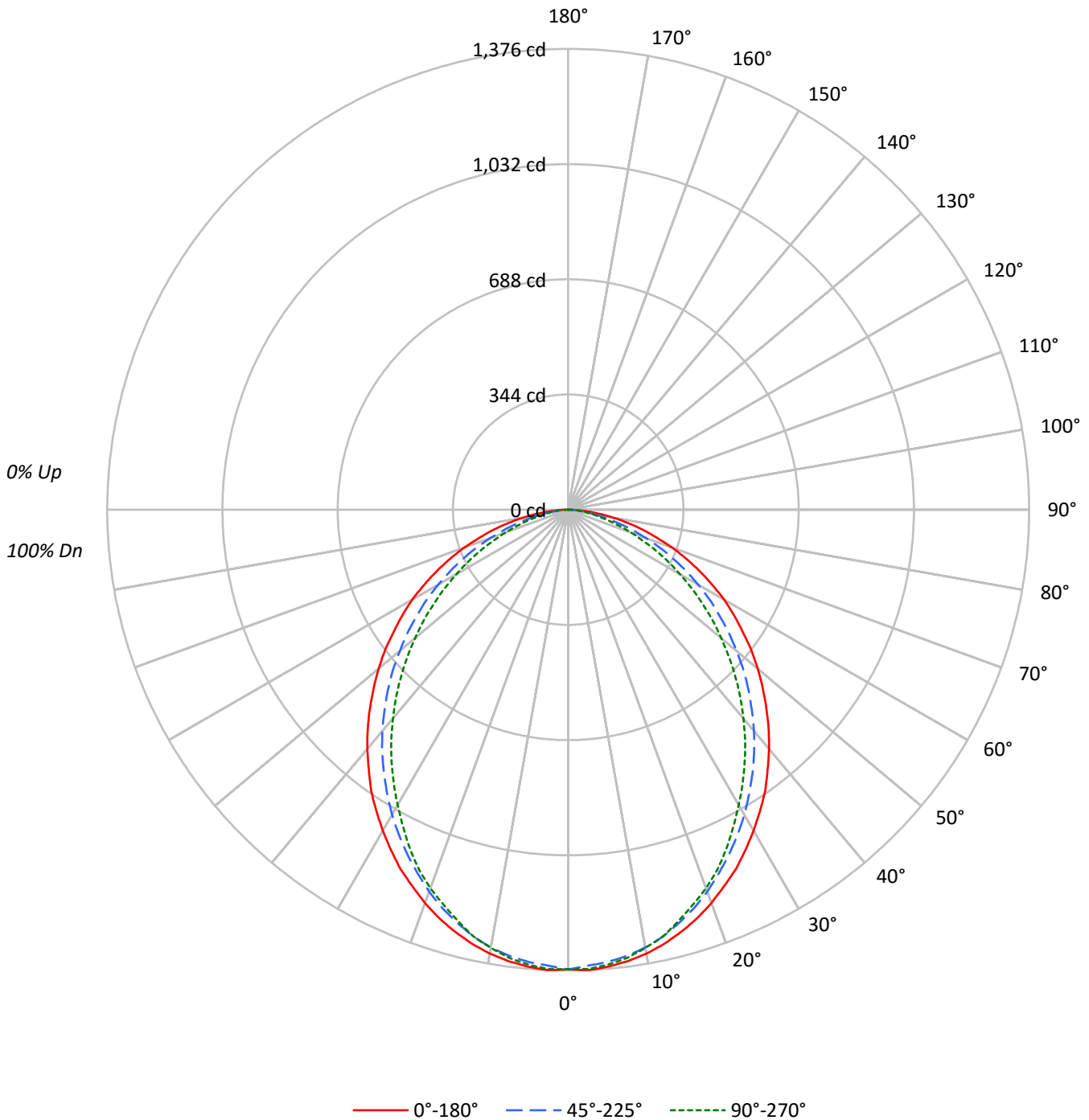
Input Watts (W): 31.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P243751

CATALOG NUMBER: S125RDR-H1090D930-X4F0-XX-UDD-F-W

### Luminous Intensity Polar Plot





TEST NUMBER: P243751

CATALOG NUMBER: S125RDR-H1090D930-X4F0-XX-UDD-F-W

**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	97	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	63	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	43	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

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

	0°	45°	90°
0°	9754	9754	9754
5°	9771	9672	9729
10°	9713	9579	9586
15°	9600	9398	9354
20°	9452	9178	9096
25°	9284	8907	8761
30°	9080	8629	8355
35°	8893	8322	7973
40°	8653	8006	7541
45°	8407	7647	7094
50°	8162	7251	6589
55°	7871	6813	6058
60°	7633	6364	5484
65°	7263	5827	4854
70°	6855	5100	4142
75°	6308	4259	3369
80°	5546	3295	2771
85°	4722	2724	2561



TEST NUMBER: P243751

CATALOG NUMBER: S125RDR-H1090D930-X4F0-XX-UDD-F-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.3	3.9
10°-20°	362.1	11.0
20°-30°	526.9	16.1
30°-40°	603.4	18.4
40°-50°	590.4	18.0
50°-60°	498.5	15.2
60°-70°	349.0	10.6
70°-80°	177.2	5.4
80°-90°	43.6	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°	1018.2	31.0
0°-40°	1621.6	49.4
0°-60°	2710.6	82.6
0°-90°	3280.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3280.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1372	1372	1372	1372	1372	
5°	1370	1366	1356	1365	1364	130
15°	1305	1300	1277	1276	1271	368
25°	1184	1170	1136	1124	1117	545
35°	1025	1000	959	931	919	640
45°	836	809	761	721	706	645
55°	635	608	550	506	489	570
65°	432	399	346	303	289	428
75°	230	201	155	130	123	243
85°	58	37	33	31	31	66
90°	0	0	0	0	0	



TEST NUMBER: P243751

CATALOG NUMBER: S125RDR-H1090D930-X4F0-XX-UDD-F-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1372.4	1372.4	1372.4	1372.4	1372.4
2.5°	1376.3	1373.4	1362.6	1372.4	1372.4
5°	1369.5	1366.5	1355.7	1364.6	1363.6
7.5°	1359.7	1356.7	1343.9	1352.8	1349.8
10°	1345.9	1342.0	1327.3	1332.2	1328.2
12.5°	1327.3	1323.3	1305.7	1307.6	1305.7
15°	1304.7	1299.8	1277.2	1276.2	1271.3
17.5°	1279.2	1272.3	1247.7	1244.8	1236.9
20°	1249.7	1240.9	1213.4	1207.5	1202.6
22.5°	1216.3	1207.5	1175.1	1166.3	1163.3
25°	1183.9	1170.2	1135.8	1124.0	1117.2
27.5°	1145.6	1129.9	1094.6	1078.9	1067.1
30°	1106.4	1088.7	1051.4	1030.8	1018.0
32.5°	1066.1	1045.5	1005.3	979.7	968.9
35°	1024.9	1000.4	959.1	930.7	918.9
37.5°	977.8	953.2	912.0	878.6	867.8
40°	932.6	907.1	862.9	826.6	812.8
42.5°	885.5	859.0	810.9	772.6	760.8
45°	836.4	808.9	760.8	720.6	705.8
47.5°	787.3	759.8	709.8	669.5	650.9
50°	738.2	708.8	655.8	614.5	595.9
52.5°	689.2	656.8	604.7	560.6	543.9
55°	635.2	607.7	549.8	505.6	488.9
57.5°	587.1	556.6	501.6	456.5	437.8
60°	537.0	503.6	447.7	403.5	385.8
62.5°	484.0	450.6	396.6	352.4	336.7
65°	431.9	398.6	346.5	303.3	288.6
67.5°	379.9	348.5	296.5	256.2	239.5
70°	329.9	297.5	245.4	209.1	199.3
72.5°	276.8	251.3	199.3	166.9	159.0
75°	229.7	201.2	155.1	129.6	122.7
77.5°	181.6	154.1	114.9	97.2	91.3
80°	135.5	111.9	80.5	69.7	67.7
82.5°	93.3	70.7	53.0	51.0	50.1
85°	57.9	37.3	33.4	31.4	31.4
87.5°	24.5	15.7	15.7	14.7	15.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)