

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: P243756

Luminaire Tested: **S125RDR-H1090D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243756  
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-H1090D935-X4F0-XX-UDD-F-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3464.3 lumens  
Efficiency: N/A  
Efficacy: 110.0 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

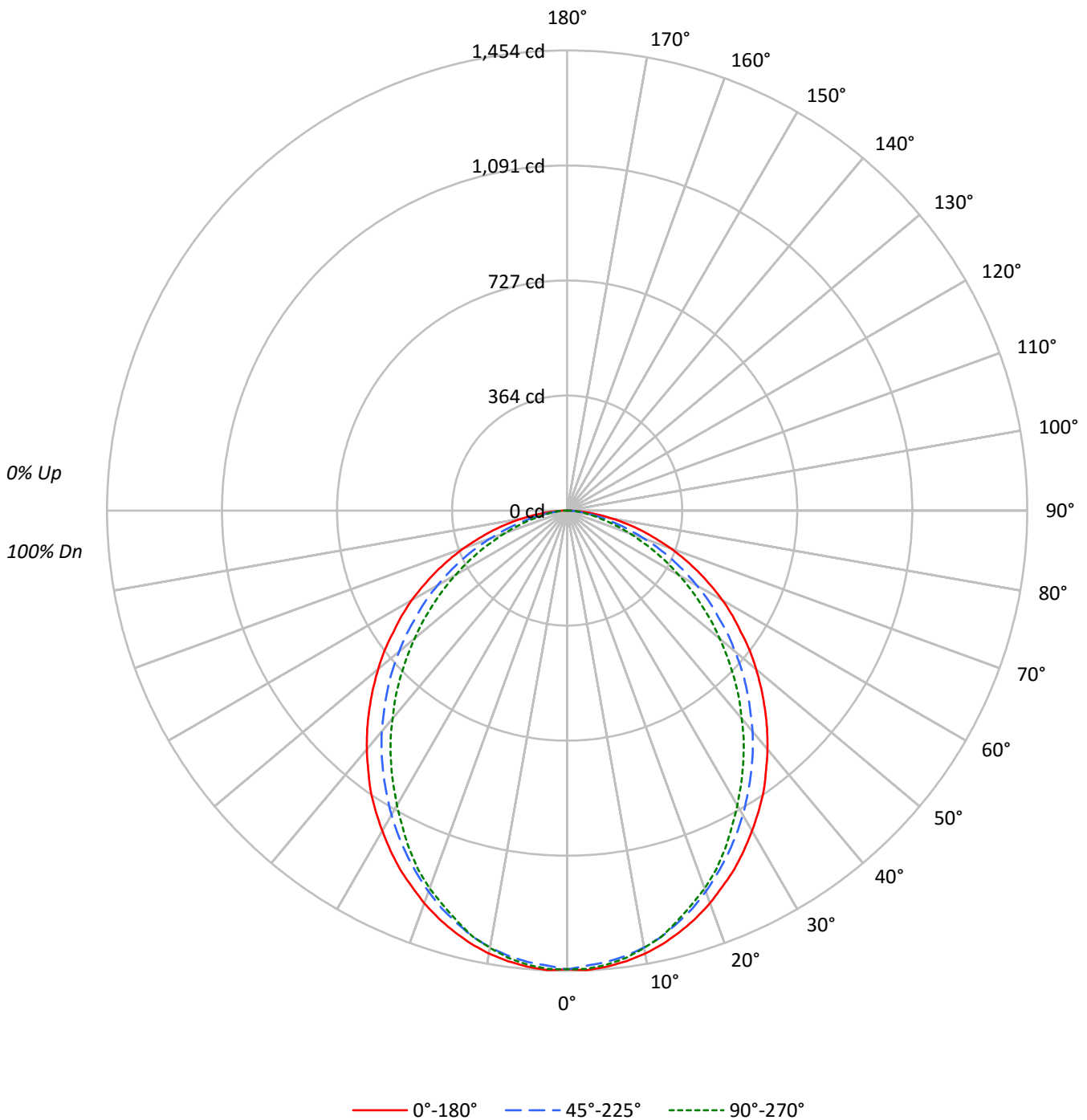
Input Watts (W): 31.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	10301	10301	10301
5°	10318	10214	10274
10°	10258	10116	10123
15°	10138	9925	9879
20°	9982	9692	9606
25°	9805	9407	9252
30°	9589	9112	8823
35°	9391	8788	8420
40°	9138	8455	7964
45°	8878	8076	7492
50°	8620	7657	6958
55°	8312	7194	6398
60°	8061	6719	5791
65°	7672	6155	5126
70°	7238	5386	4374
75°	6662	4498	3559
80°	5857	3479	2926
85°	4991	2870	2707



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.5	3.9
10°-20°	382.4	11.0
20°-30°	556.4	16.1
30°-40°	637.2	18.4
40°-50°	623.5	18.0
50°-60°	526.4	15.2
60°-70°	368.6	10.6
70°-80°	187.2	5.4
80°-90°	46.1	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°	1075.3	31.0
0°-40°	1712.5	49.4
0°-60°	2862.5	82.6
0°-90°	3464.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3464.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1449	1449	1449	1449	1449	
5°	1446	1443	1432	1441	1440	137
15°	1378	1373	1349	1348	1343	388
25°	1250	1236	1200	1187	1180	575
35°	1082	1056	1013	983	970	676
45°	883	854	804	761	745	682
55°	671	642	581	534	516	602
65°	456	421	366	320	305	452
75°	243	212	164	137	130	256
85°	61	39	35	33	33	70
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1449.3	1449.3	1449.3	1449.3	1449.3
2.5°	1453.5	1450.4	1439.0	1449.3	1449.3
5°	1446.2	1443.1	1431.7	1441.1	1440.0
7.5°	1435.9	1432.8	1419.3	1428.6	1425.5
10°	1421.4	1417.2	1401.7	1406.8	1402.7
12.5°	1401.7	1397.5	1378.8	1380.9	1378.8
15°	1377.8	1372.6	1348.8	1347.7	1342.6
17.5°	1350.9	1343.6	1317.7	1314.6	1306.3
20°	1319.8	1310.4	1281.4	1275.2	1270.0
22.5°	1284.5	1275.2	1241.0	1231.6	1228.5
25°	1250.3	1235.8	1199.5	1187.1	1179.8
27.5°	1209.9	1193.3	1156.0	1139.4	1126.9
30°	1168.4	1149.7	1110.3	1088.6	1075.1
32.5°	1125.9	1104.1	1061.6	1034.7	1023.3
35°	1082.3	1056.4	1012.9	982.8	970.4
37.5°	1032.6	1006.7	963.1	927.9	916.5
40°	984.9	957.9	911.3	872.9	858.4
42.5°	935.1	907.1	856.3	815.9	803.5
45°	883.3	854.3	803.5	761.0	745.4
47.5°	831.5	802.4	749.6	707.0	687.4
50°	779.6	748.5	692.5	649.0	629.3
52.5°	727.8	693.6	638.6	592.0	574.3
55°	670.8	641.7	580.6	533.9	516.3
57.5°	620.0	587.8	529.8	482.1	462.4
60°	567.1	531.8	472.7	426.1	407.4
62.5°	511.1	475.9	418.8	372.2	355.6
65°	456.2	420.9	366.0	320.3	304.8
67.5°	401.2	368.0	313.1	270.6	253.0
70°	348.3	314.1	259.2	220.8	210.5
72.5°	292.4	265.4	210.5	176.2	168.0
75°	242.6	212.5	163.8	136.8	129.6
77.5°	191.8	162.8	121.3	102.6	96.4
80°	143.1	118.2	85.0	73.6	71.5
82.5°	98.5	74.6	56.0	53.9	52.9
85°	61.2	39.4	35.2	33.2	33.2
87.5°	25.9	16.6	16.6	15.6	16.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)