

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: P242897

Luminaire Tested: **S125RDR-S1270D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P242897  
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-S1270D935-X4F0-XX-UDD-F-W  
Description: DEFINE 5 REGRESSED 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: 3991.7 lumens  
Efficiency: N/A  
Efficacy: 97.1 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

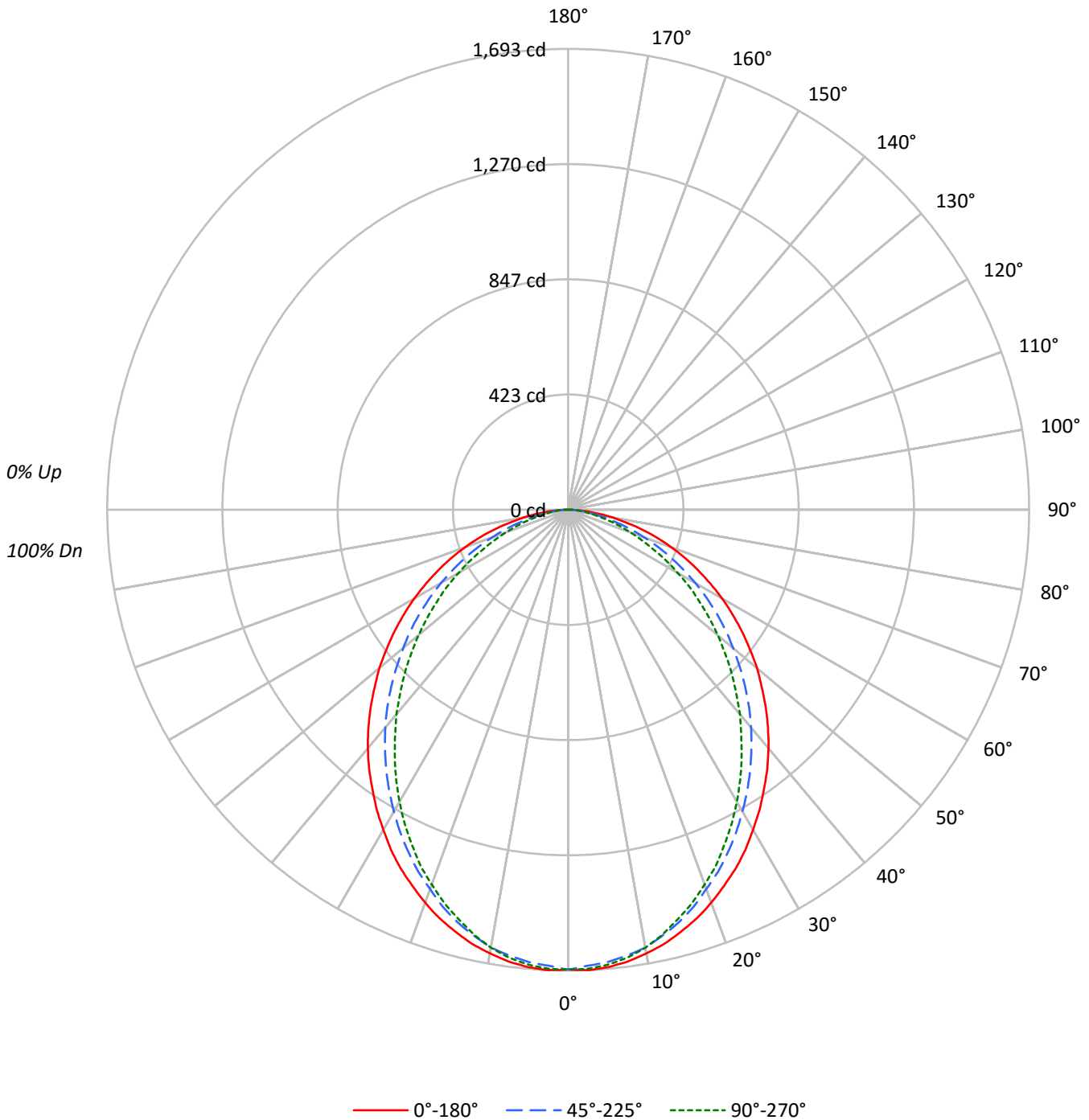
Input Watts (W): 41.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	12008	12008	12008
5°	12036	11899	11972
10°	11945	11788	11788
15°	11802	11549	11455
20°	11621	11215	11080
25°	11408	10888	10647
30°	11142	10504	10169
35°	10872	10109	9633
40°	10620	9696	9104
45°	10313	9235	8530
50°	10003	8734	7930
55°	9645	8254	7290
60°	9286	7673	6603
65°	8863	6996	5815
70°	8379	6151	5012
75°	7708	5187	4171
80°	6790	4072	3499
85°	5725	3327	3123



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.0	4.0
10°-20°	444.4	11.1
20°-30°	644.3	16.1
30°-40°	734.1	18.4
40°-50°	715.5	17.9
50°-60°	602.2	15.1
60°-70°	422.0	10.6
70°-80°	216.3	5.4
80°-90°	53.9	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°	1247.7	31.3
0°-40°	1981.8	49.6
0°-60°	3299.5	82.7
0°-90°	3991.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3991.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1690	1690	1690	1690	1690	
5°	1687	1682	1668	1681	1678	160
15°	1604	1596	1570	1568	1557	452
25°	1455	1436	1388	1372	1358	669
35°	1253	1222	1165	1128	1110	785
45°	1026	989	919	868	849	791
55°	778	738	666	609	588	696
65°	527	484	416	365	346	522
75°	281	242	189	161	152	297
85°	70	47	41	40	38	81
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1689.5	1689.5	1689.5	1689.5	1689.5
2.5°	1693.3	1689.5	1676.8	1689.5	1688.2
5°	1687.0	1681.9	1667.8	1680.6	1678.0
7.5°	1674.2	1669.1	1652.5	1662.7	1660.2
10°	1655.1	1651.2	1633.4	1637.2	1633.4
12.5°	1633.4	1628.3	1602.7	1605.3	1598.9
15°	1604.0	1596.4	1569.6	1568.3	1556.8
17.5°	1573.4	1561.9	1530.0	1523.6	1514.7
20°	1536.4	1523.6	1482.8	1476.4	1464.9
22.5°	1495.6	1482.8	1439.4	1425.4	1416.4
25°	1454.7	1435.6	1388.4	1371.8	1357.7
27.5°	1408.8	1385.8	1336.0	1314.4	1300.3
30°	1357.7	1333.5	1279.9	1250.5	1239.1
32.5°	1308.0	1278.6	1223.7	1190.6	1175.3
35°	1253.1	1222.5	1165.1	1128.0	1110.2
37.5°	1200.8	1163.8	1105.1	1061.7	1043.8
40°	1144.6	1106.4	1045.1	996.6	981.3
42.5°	1085.9	1046.4	982.6	936.6	912.4
45°	1026.0	989.0	918.8	867.7	848.6
47.5°	963.4	925.1	855.0	802.6	781.0
50°	904.7	862.6	789.9	736.3	717.2
52.5°	840.9	797.5	729.9	671.2	652.1
55°	778.4	737.6	666.1	608.7	588.3
57.5°	714.6	671.2	602.3	546.2	528.3
60°	653.3	608.7	539.8	483.6	464.5
62.5°	588.3	546.2	476.0	424.9	405.8
65°	527.0	483.6	416.0	365.0	345.8
67.5°	465.8	422.4	357.3	308.8	293.5
70°	403.2	359.9	296.0	256.5	241.2
72.5°	342.0	299.9	241.2	205.4	196.5
75°	280.7	242.5	188.9	160.8	151.9
77.5°	218.2	187.6	142.9	121.2	113.6
80°	165.9	135.3	99.5	88.0	85.5
82.5°	114.8	88.0	66.4	62.5	61.3
85°	70.2	47.2	40.8	39.6	38.3
87.5°	29.3	20.4	19.1	19.1	17.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)