

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: P243746

Luminaire Tested: **S125RDR-H1090D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243746
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-H1090D840-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4063.3 lumens
Efficiency: N/A
Efficacy: 129.0 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

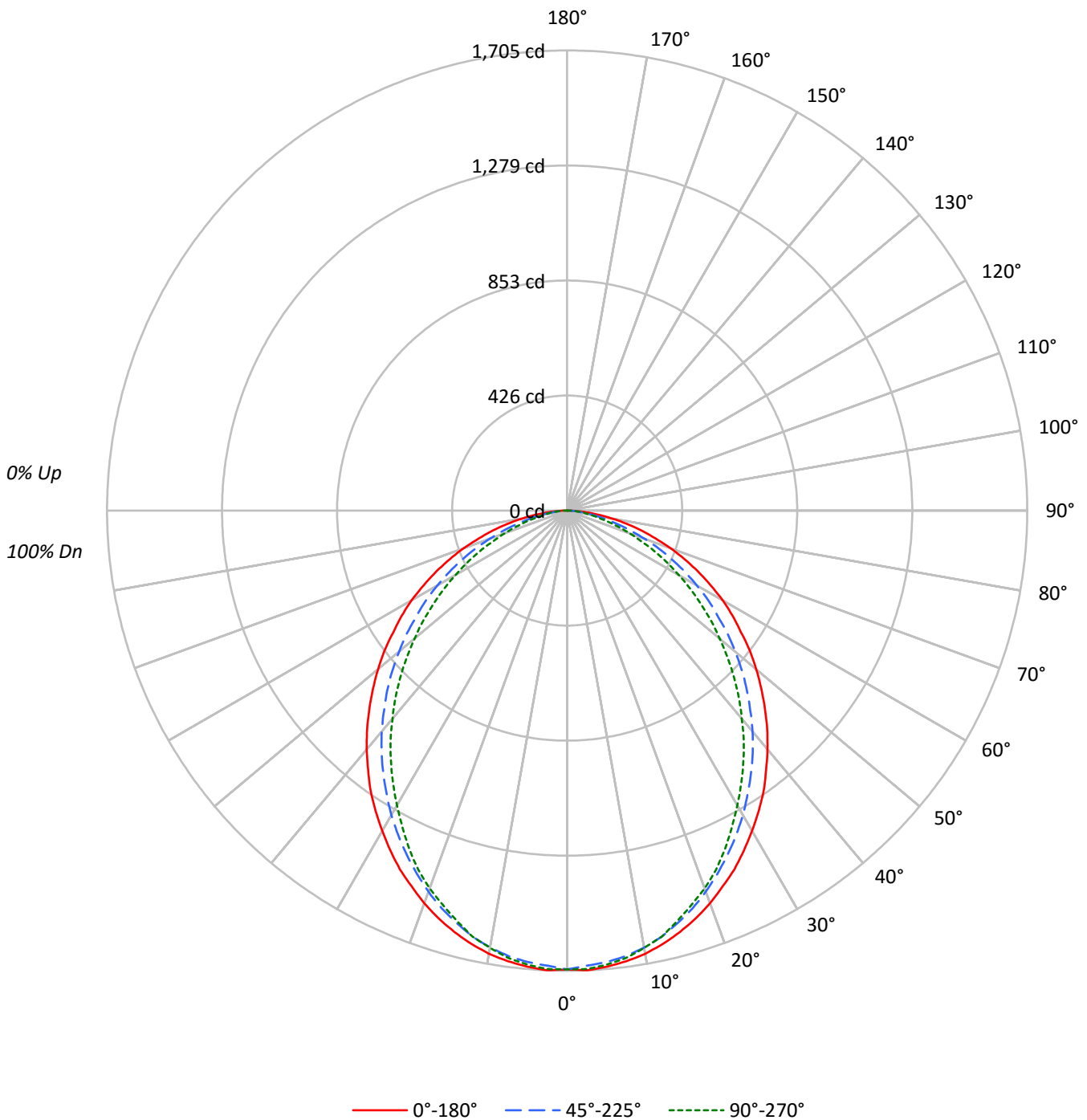
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	12082	12082	12082
5°	12102	11981	12050
10°	12031	11865	11873
15°	11891	11640	11587
20°	11708	11367	11267
25°	11500	11033	10852
30°	11247	10688	10349
35°	11015	10308	9876
40°	10718	9916	9341
45°	10413	9472	8788
50°	10111	8982	8161
55°	9748	8437	7504
60°	9454	7882	6793
65°	8997	7218	6012
70°	8491	6317	5129
75°	7813	5275	4174
80°	6868	4081	3434
85°	5847	3368	3172



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.1	3.9
10°-20°	448.5	11.0
20°-30°	652.6	16.1
30°-40°	747.4	18.4
40°-50°	731.3	18.0
50°-60°	617.5	15.2
60°-70°	432.3	10.6
70°-80°	219.5	5.4
80°-90°	54.0	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°	1261.2	31.0
0°-40°	2008.6	49.4
0°-60°	3357.4	82.6
0°-90°	4063.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4063.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1700	1700	1700	1700	1700	
5°	1696	1693	1679	1690	1689	161
15°	1616	1610	1582	1581	1575	456
25°	1466	1449	1407	1392	1384	675
35°	1270	1239	1188	1153	1138	793
45°	1036	1002	942	892	874	800
55°	787	753	681	626	606	706
65°	535	494	429	376	358	530
75°	284	249	192	160	152	301
85°	72	46	41	39	39	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1699.9	1699.9	1699.9	1699.9	1699.9
2.5°	1704.8	1701.2	1687.8	1699.9	1699.9
5°	1696.3	1692.6	1679.3	1690.2	1689.0
7.5°	1684.1	1680.5	1664.7	1675.6	1672.0
10°	1667.1	1662.2	1644.0	1650.1	1645.2
12.5°	1644.0	1639.1	1617.2	1619.7	1617.2
15°	1616.0	1610.0	1582.0	1580.8	1574.7
17.5°	1584.4	1575.9	1545.5	1541.9	1532.1
20°	1547.9	1537.0	1502.9	1495.7	1489.6
22.5°	1506.6	1495.7	1455.5	1444.6	1440.9
25°	1466.5	1449.4	1406.9	1392.3	1383.8
27.5°	1419.0	1399.6	1355.8	1336.4	1321.8
30°	1370.4	1348.5	1302.3	1276.8	1261.0
32.5°	1320.6	1295.0	1245.2	1213.5	1200.2
35°	1269.5	1239.1	1188.0	1152.7	1138.2
37.5°	1211.1	1180.7	1129.6	1088.3	1074.9
40°	1155.2	1123.6	1068.8	1023.9	1006.8
42.5°	1096.8	1064.0	1004.4	957.0	942.4
45°	1036.0	1002.0	942.4	892.5	874.3
47.5°	975.2	941.2	879.2	829.3	806.2
50°	914.4	877.9	812.3	761.2	738.1
52.5°	853.6	813.5	749.0	694.3	673.7
55°	786.7	752.7	680.9	626.2	605.6
57.5°	727.2	689.5	621.4	565.4	542.3
60°	665.1	623.8	554.5	499.8	477.9
62.5°	599.5	558.1	491.3	436.5	417.1
65°	535.0	493.7	429.2	375.7	357.5
67.5°	470.6	431.7	367.2	317.4	296.7
70°	408.6	368.4	304.0	259.0	246.8
72.5°	342.9	311.3	246.8	206.7	197.0
75°	284.5	249.3	192.1	160.5	152.0
77.5°	225.0	190.9	142.3	120.4	113.1
80°	167.8	138.6	99.7	86.3	83.9
82.5°	115.5	87.6	65.7	63.2	62.0
85°	71.7	46.2	41.3	38.9	38.9
87.5°	30.4	19.5	19.5	18.2	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)