

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: P243741

Luminaire Tested: **S125RDR-H1090D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243741
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-H1090D835-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4023.6 lumens
Efficiency: N/A
Efficacy: 127.7 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

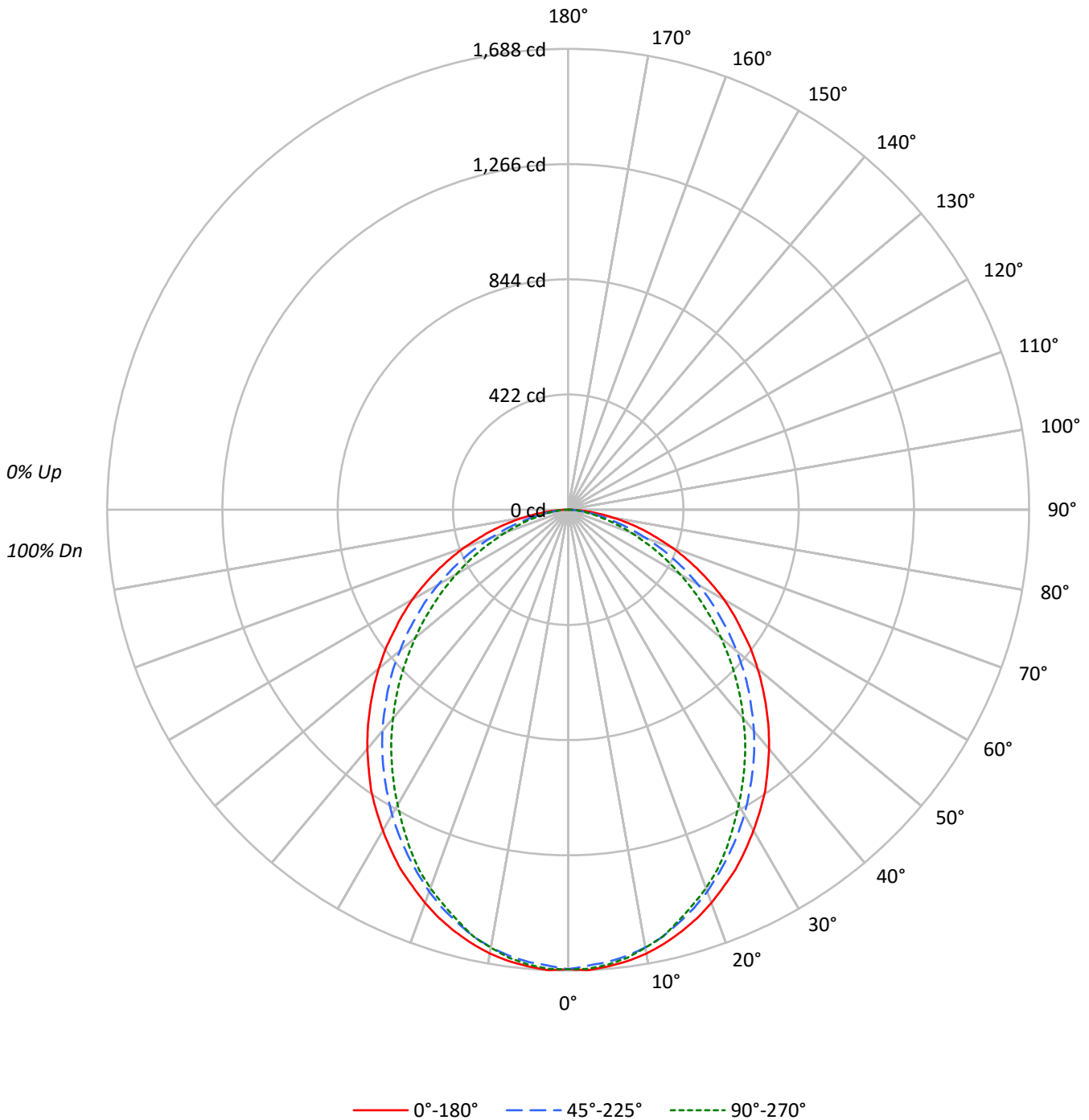
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	11964	11964	11964
5°	11984	11864	11932
10°	11914	11749	11757
15°	11774	11526	11473
20°	11593	11257	11156
25°	11387	10925	10746
30°	11137	10584	10248
35°	10907	10207	9778
40°	10613	9820	9250
45°	10312	9380	8701
50°	10012	8893	8082
55°	9654	8355	7430
60°	9362	7805	6726
65°	8910	7147	5953
70°	8408	6255	5079
75°	7738	5223	4133
80°	6802	4040	3401
85°	5790	3335	3140



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.5	3.9
10°-20°	444.1	11.0
20°-30°	646.2	16.1
30°-40°	740.1	18.4
40°-50°	724.2	18.0
50°-60°	611.4	15.2
60°-70°	428.1	10.6
70°-80°	217.4	5.4
80°-90°	53.5	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°	1248.9	31.0
0°-40°	1989.0	49.4
0°-60°	3324.6	82.6
0°-90°	4023.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4023.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1683	1683	1683	1683	1683	
5°	1680	1676	1663	1674	1672	159
15°	1600	1594	1566	1565	1559	451
25°	1452	1435	1393	1379	1370	668
35°	1257	1227	1176	1142	1127	785
45°	1026	992	933	884	866	792
55°	779	745	674	620	600	699
65°	530	489	425	372	354	525
75°	282	247	190	159	150	298
85°	71	46	41	38	38	81
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1683.3	1683.3	1683.3	1683.3	1683.3
2.5°	1688.1	1684.5	1671.3	1683.3	1683.3
5°	1679.7	1676.1	1662.9	1673.7	1672.5
7.5°	1667.7	1664.1	1648.4	1659.2	1655.6
10°	1650.8	1646.0	1627.9	1634.0	1629.1
12.5°	1627.9	1623.1	1601.5	1603.9	1601.5
15°	1600.2	1594.2	1566.5	1565.3	1559.3
17.5°	1568.9	1560.5	1530.4	1526.8	1517.2
20°	1532.8	1522.0	1488.3	1481.0	1475.0
22.5°	1491.9	1481.0	1441.3	1430.5	1426.9
25°	1452.1	1435.3	1393.1	1378.7	1370.3
27.5°	1405.2	1385.9	1342.6	1323.3	1308.9
30°	1357.0	1335.3	1289.6	1264.3	1248.7
32.5°	1307.7	1282.4	1233.0	1201.7	1188.4
35°	1257.1	1227.0	1176.4	1141.5	1127.0
37.5°	1199.3	1169.2	1118.6	1077.7	1064.4
40°	1143.9	1112.6	1058.4	1013.9	997.0
42.5°	1086.1	1053.6	994.6	947.6	933.2
45°	1025.9	992.2	933.2	883.8	865.7
47.5°	965.7	932.0	870.6	821.2	798.3
50°	905.5	869.4	804.3	753.8	730.9
52.5°	845.3	805.5	741.7	687.5	667.1
55°	779.1	745.3	674.3	620.1	599.6
57.5°	720.1	682.7	615.3	559.9	537.0
60°	658.6	617.7	549.1	494.9	473.2
62.5°	593.6	552.7	486.5	432.3	413.0
65°	529.8	488.9	425.0	372.1	354.0
67.5°	466.0	427.5	363.6	314.3	293.8
70°	404.6	364.8	301.0	256.5	244.4
72.5°	339.6	308.2	244.4	204.7	195.1
75°	281.8	246.8	190.2	158.9	150.5
77.5°	222.8	189.0	140.9	119.2	112.0
80°	166.2	137.3	98.7	85.5	83.1
82.5°	114.4	86.7	65.0	62.6	61.4
85°	71.0	45.8	40.9	38.5	38.5
87.5°	30.1	19.3	19.3	18.1	19.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)