

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: P242778

Luminaire Tested: **S125DR-S1090D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242778
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DR-S1090D835-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4195.4 lumens
Efficiency: N/A
Efficacy: 120.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

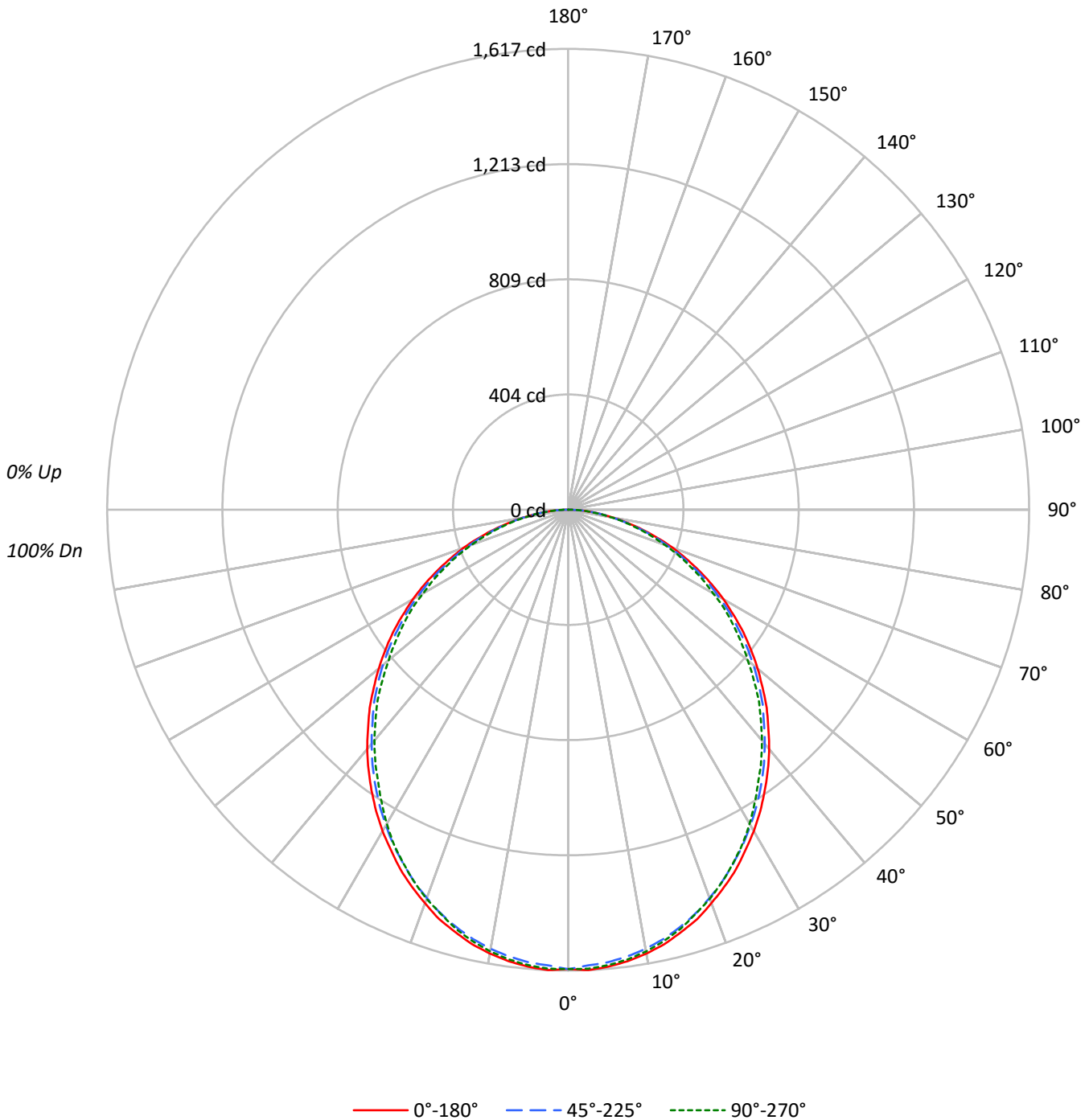
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84				84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70				70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59				59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51				51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44				44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39				39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34				34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31				31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28				28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25				25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11456	11456	11456
5°	11482	11373	11446
10°	11412	11292	11357
15°	11288	11157	11203
20°	11112	10967	10986
25°	10921	10741	10730
30°	10685	10497	10445
35°	10434	10235	10091
40°	10175	9951	9809
45°	9896	9690	9498
50°	9589	9376	9094
55°	9291	9023	8771
60°	8937	8665	8357
65°	8515	8235	7956
70°	8109	7739	7473
75°	7390	7145	6898
80°	6577	6471	6315
85°	5716	5823	5513



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.1	3.6
10°-20°	429.6	10.2
20°-30°	634.3	15.1
30°-40°	740.0	17.6
40°-50°	743.3	17.7
50°-60°	652.5	15.6
60°-70°	486.0	11.6
70°-80°	277.6	6.6
80°-90°	80.1	1.9
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°	1216.0	29.0
0°-40°	1956.1	46.6
0°-60°	3351.8	79.9
0°-90°	4195.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4195.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1612	1612	1612	1612	1612	
5°	1609	1607	1594	1606	1604	153
15°	1534	1530	1516	1523	1523	433
25°	1393	1386	1370	1372	1368	641
35°	1203	1198	1180	1173	1163	752
45°	984	979	964	949	945	759
55°	750	746	728	717	708	669
65°	506	504	490	478	473	502
75°	269	266	260	256	251	286
85°	70	71	71	70	68	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1611.9	1611.9	1611.9	1611.9	1611.9
2.5°	1617.0	1613.2	1600.4	1613.2	1611.9
5°	1609.4	1606.8	1594.1	1605.5	1604.3
7.5°	1597.9	1595.3	1581.3	1592.8	1591.5
10°	1581.3	1578.8	1564.7	1574.9	1573.7
12.5°	1560.9	1555.8	1543.0	1550.7	1550.7
15°	1534.1	1530.3	1516.3	1522.6	1522.6
17.5°	1506.1	1499.7	1485.7	1493.3	1486.9
20°	1469.1	1466.5	1450.0	1458.9	1452.5
22.5°	1432.1	1427.0	1411.7	1416.8	1413.0
25°	1392.6	1386.2	1369.6	1372.2	1368.3
27.5°	1346.7	1342.8	1326.3	1327.5	1323.7
30°	1302.0	1298.2	1279.1	1276.5	1272.7
32.5°	1253.6	1247.2	1230.6	1225.5	1217.9
35°	1202.6	1197.5	1179.6	1173.2	1163.0
37.5°	1150.3	1143.9	1127.3	1118.4	1112.0
40°	1096.7	1090.3	1072.5	1061.0	1057.2
42.5°	1039.3	1034.2	1016.4	1006.2	999.8
45°	984.5	979.4	964.1	948.8	945.0
47.5°	924.6	925.8	906.7	891.4	882.5
50°	867.2	863.3	848.0	831.5	822.5
52.5°	808.5	806.0	789.4	775.3	765.1
55°	749.8	746.0	728.2	716.7	707.8
57.5°	687.4	686.1	670.8	655.5	651.7
60°	628.7	623.6	609.6	596.8	587.9
62.5°	567.5	563.7	552.2	538.2	531.8
65°	506.3	503.7	489.7	478.2	473.1
67.5°	446.3	441.2	431.0	420.8	418.3
70°	390.2	383.8	372.4	364.7	359.6
72.5°	329.0	325.2	318.8	309.9	304.8
75°	269.1	266.5	260.2	256.3	251.2
77.5°	213.0	211.7	207.9	205.3	201.5
80°	160.7	160.7	158.1	156.9	154.3
82.5°	114.8	112.2	112.2	109.7	109.7
85°	70.1	71.4	71.4	70.1	67.6
87.5°	34.4	34.4	33.2	33.2	30.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)