

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: P242259

Luminaire Tested: **S122DR-S1005D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242259
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-10)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DR-S1005D830-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3696.2 lumens
Efficiency: N/A
Efficacy: 89.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')
CIE Type: Direct

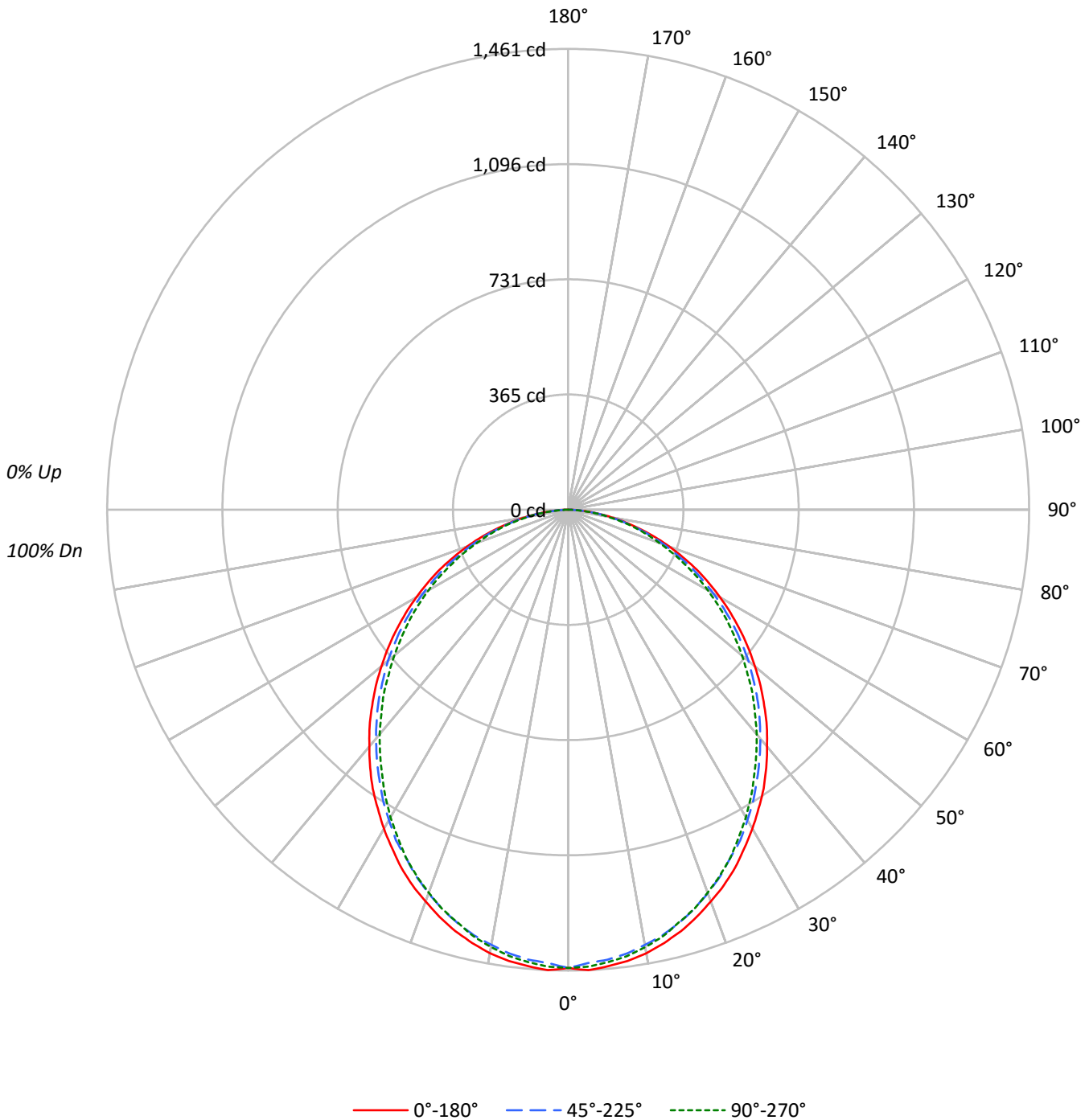
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27673	27673	27673
5°	27778	27377	27537
10°	27614	27099	27235
15°	27272	26748	26720
20°	26787	26221	26193
25°	26305	25571	25571
30°	25685	24979	24763
35°	25109	24264	23906
40°	24383	23550	23100
45°	23670	22840	22277
50°	22891	22106	21318
55°	22080	21247	20457
60°	21181	20221	19478
65°	20210	19205	18321
70°	18980	17972	17114
75°	17273	16551	16139
80°	15324	14863	14095
85°	12523	11911	10687



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.7	3.7
10°-20°	384.7	10.4
20°-30°	565.4	15.3
30°-40°	656.6	17.8
40°-50°	655.8	17.7
50°-60°	571.9	15.5
60°-70°	422.7	11.4
70°-80°	239.2	6.5
80°-90°	63.1	1.7
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°	1086.8	29.4
0°-40°	1743.5	47.2
0°-60°	2971.1	80.4
0°-90°	3696.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3696.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1453	1453	1453	1453	1453	
5°	1453	1447	1432	1443	1440	138
15°	1383	1375	1356	1362	1355	390
25°	1252	1240	1217	1220	1217	576
35°	1080	1066	1044	1035	1028	674
45°	879	869	848	833	827	678
55°	665	657	640	623	616	595
65°	448	440	426	414	406	443
75°	235	232	225	216	219	250
85°	57	56	54	50	49	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1452.8	1452.8	1452.8	1452.8	1452.8
2.5°	1461.2	1454.2	1438.8	1452.8	1450.0
5°	1452.8	1447.2	1431.8	1443.0	1440.2
7.5°	1443.0	1434.6	1419.3	1430.4	1427.7
10°	1427.7	1417.9	1401.1	1412.3	1408.1
12.5°	1406.7	1398.3	1381.6	1388.5	1385.7
15°	1383.0	1374.6	1356.4	1362.0	1355.0
17.5°	1353.6	1345.2	1327.1	1334.1	1327.1
20°	1321.5	1313.1	1293.6	1297.7	1292.2
22.5°	1289.4	1276.8	1258.6	1258.6	1255.8
25°	1251.6	1240.5	1216.7	1219.5	1216.7
27.5°	1209.7	1200.0	1181.8	1177.6	1170.6
30°	1167.8	1156.7	1135.7	1131.5	1125.9
32.5°	1123.1	1114.7	1092.4	1084.0	1078.4
35°	1079.8	1065.9	1043.5	1035.1	1028.1
37.5°	1030.9	1018.4	996.0	986.2	979.2
40°	980.6	969.5	947.1	934.5	929.0
42.5°	931.7	920.6	898.2	884.3	875.9
45°	878.7	868.9	847.9	832.6	827.0
47.5°	827.0	817.2	794.8	779.5	771.1
50°	772.5	765.5	746.0	726.4	719.4
52.5°	719.4	709.6	691.5	676.1	666.3
55°	664.9	656.6	639.8	623.0	616.0
57.5°	610.5	603.5	585.3	568.5	563.0
60°	556.0	550.4	530.8	515.5	511.3
62.5°	502.9	493.1	479.1	465.2	459.6
65°	448.4	440.0	426.1	413.5	406.5
67.5°	392.5	385.6	373.0	363.2	357.6
70°	340.8	335.3	322.7	312.9	307.3
72.5°	287.8	282.2	275.2	265.4	261.2
75°	234.7	231.9	224.9	216.5	219.3
77.5°	187.2	181.6	178.8	174.6	170.4
80°	139.7	138.3	135.5	131.3	128.5
82.5°	95.0	95.0	93.6	88.0	88.0
85°	57.3	55.9	54.5	50.3	48.9
87.5°	25.1	22.4	19.6	15.4	14.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)