

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: P242422

Luminaire Tested: **S123DR-S340D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242422
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-11)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DR-S340D927-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1046.9 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.23' x L: 3.88' x H: 0')
CIE Type: Direct

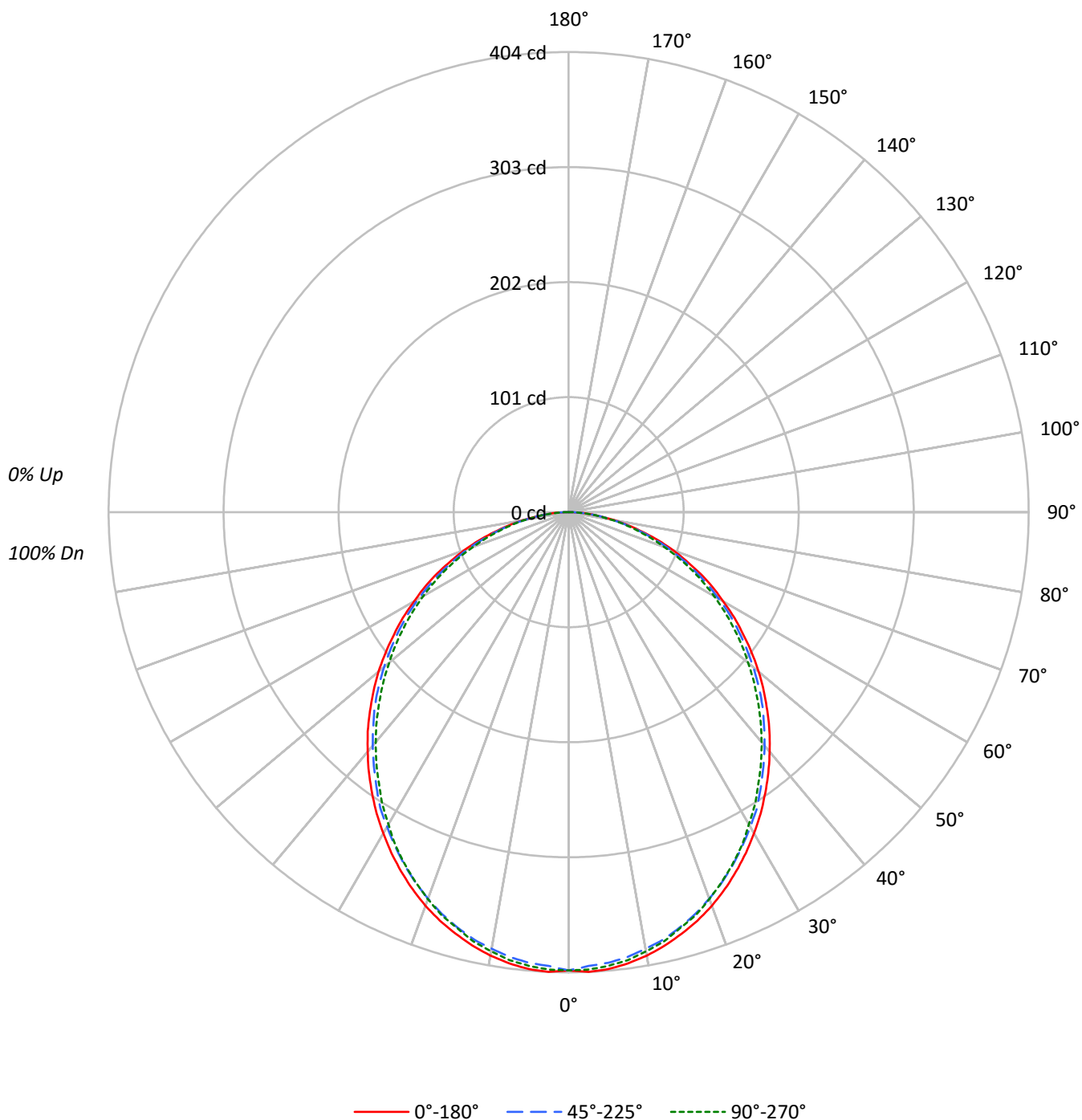
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4876	4876	4876
5°	4899	4832	4865
10°	4865	4789	4819
15°	4809	4736	4745
20°	4743	4658	4662
25°	4654	4566	4557
30°	4556	4463	4430
35°	4453	4355	4299
40°	4345	4236	4171
45°	4227	4126	4027
50°	4109	3992	3881
55°	3954	3852	3734
60°	3799	3690	3571
65°	3660	3511	3402
70°	3455	3310	3161
75°	3157	3044	2918
80°	2848	2729	2701
85°	2503	2406	2309

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.9	3.6
10°-20°	107.1	10.2
20°-30°	158.1	15.1
30°-40°	184.7	17.6
40°-50°	185.7	17.7
50°-60°	163.1	15.6
60°-70°	121.5	11.6
70°-80°	69.1	6.6
80°-90°	19.7	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°	303.2	29.0
0°-40°	487.9	46.6
0°-60°	836.7	79.9
0°-90°	1046.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1046.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	402	402	402	402	402	
5°	403	401	397	400	400	38
15°	383	382	377	380	378	108
25°	348	346	341	342	341	160
35°	301	299	294	292	290	188
45°	247	245	241	237	235	190
55°	187	187	182	178	177	168
65°	128	126	122	120	119	126
75°	67	66	65	63	62	72
85°	18	17	17	17	17	21
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	402.3	402.3	402.3	402.3	402.3
2.5°	404.0	402.6	398.8	402.3	401.9
5°	402.6	400.9	397.1	400.5	399.8
7.5°	399.5	397.8	394.0	397.1	396.7
10°	395.3	393.6	389.1	392.2	391.5
12.5°	389.8	388.4	384.3	386.4	386.0
15°	383.2	381.9	377.4	380.1	378.1
17.5°	376.0	374.2	369.8	371.8	371.1
20°	367.7	365.6	361.1	362.5	361.4
22.5°	358.3	356.3	351.8	352.8	351.4
25°	348.0	345.9	341.4	341.7	340.7
27.5°	337.2	335.2	330.3	330.7	329.6
30°	325.5	323.7	318.9	318.9	316.5
32.5°	313.7	311.3	307.8	305.4	304.4
35°	300.9	298.8	294.3	292.3	290.5
37.5°	288.1	285.4	280.9	278.4	277.4
40°	274.6	272.6	267.7	264.9	263.6
42.5°	261.1	258.7	253.9	251.1	249.7
45°	246.6	245.2	240.7	236.6	234.9
47.5°	232.4	230.4	226.2	222.1	220.7
50°	217.9	216.2	211.7	207.9	205.8
52.5°	202.7	201.7	196.8	193.7	191.6
55°	187.1	186.8	182.3	178.5	176.7
57.5°	172.6	171.2	167.8	164.3	162.2
60°	156.7	156.3	152.2	149.1	147.3
62.5°	142.5	141.5	137.3	134.2	133.2
65°	127.6	125.9	122.4	119.7	118.6
67.5°	111.7	110.3	107.6	105.1	103.8
70°	97.5	95.5	93.4	91.0	89.2
72.5°	82.7	81.3	78.9	76.8	76.1
75°	67.4	66.1	65.0	63.3	62.3
77.5°	54.0	53.3	51.9	50.5	50.5
80°	40.8	39.8	39.1	38.7	38.7
82.5°	28.0	28.0	28.0	27.3	27.0
85°	18.0	17.3	17.3	16.6	16.6
87.5°	9.0	8.0	7.6	7.3	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)