

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: P242441

Luminaire Tested: **S123DR-S340D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242441
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-S340D930-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1077.5 lumens
Efficiency: N/A
Efficacy: 92.9 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

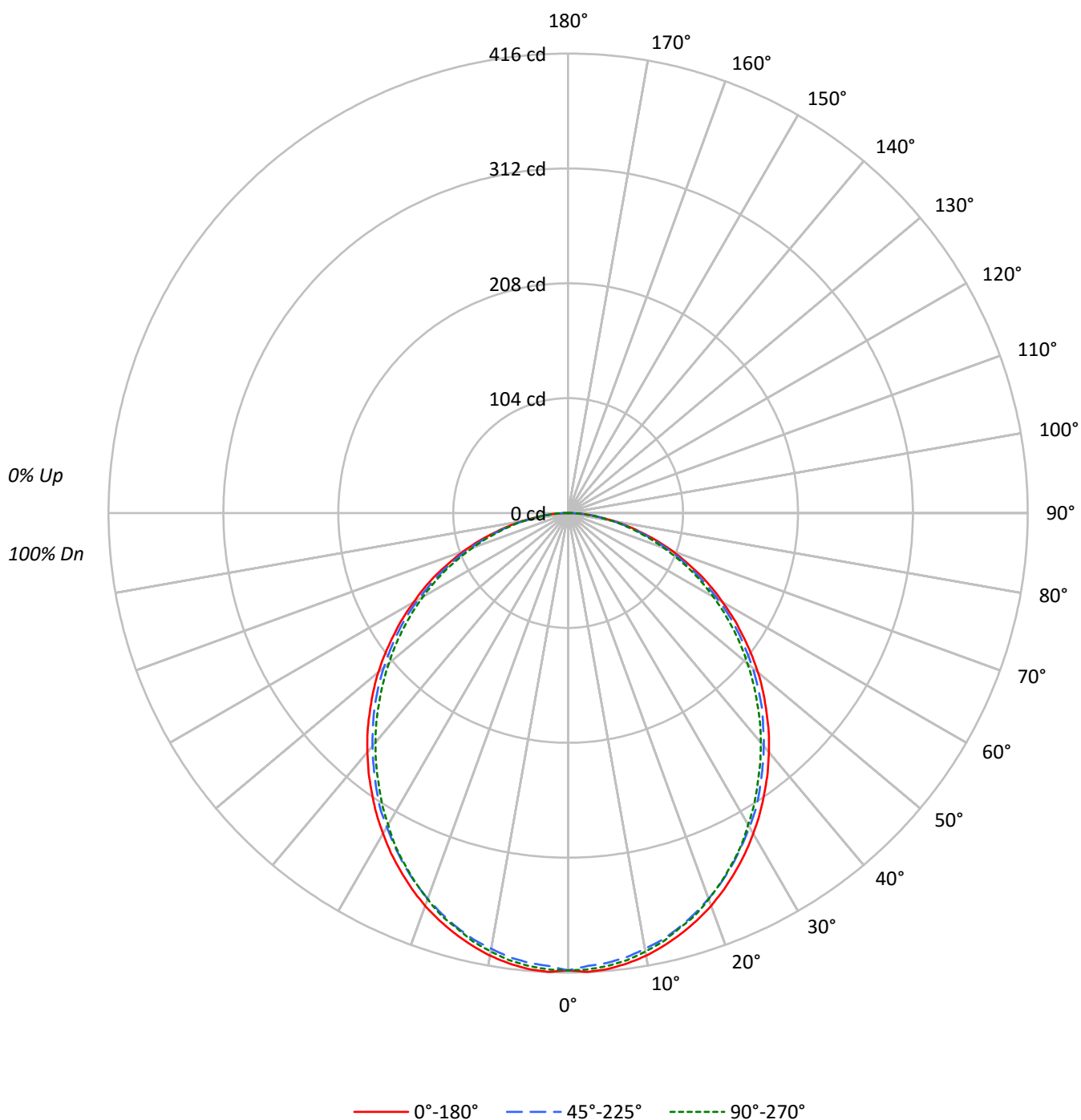
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5018	5018	5018
5°	5042	4973	5007
10°	5008	4929	4960
15°	4949	4874	4883
20°	4881	4793	4798
25°	4789	4700	4689
30°	4689	4594	4559
35°	4583	4482	4424
40°	4472	4359	4293
45°	4351	4248	4143
50°	4230	4109	3994
55°	4070	3964	3844
60°	3910	3796	3675
65°	3769	3614	3502
70°	3558	3406	3253
75°	3250	3133	3002
80°	2932	2806	2785
85°	2573	2476	2378

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.0	3.6
10°-20°	110.2	10.2
20°-30°	162.8	15.1
30°-40°	190.1	17.6
40°-50°	191.1	17.7
50°-60°	167.9	15.6
60°-70°	125.0	11.6
70°-80°	71.1	6.6
80°-90°	20.2	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°	312.0	29.0
0°-40°	502.1	46.6
0°-60°	861.1	79.9
0°-90°	1077.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1077.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	414	414	414	414	414	
5°	414	413	409	412	412	39
15°	394	393	388	391	389	111
25°	358	356	351	352	351	165
35°	310	308	303	301	299	194
45°	254	252	248	244	242	196
55°	193	192	188	184	182	173
65°	131	130	126	123	122	130
75°	69	68	67	65	64	74
85°	18	18	18	17	17	21
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	414.0	414.0	414.0	414.0	414.0
2.5°	415.8	414.4	410.4	414.0	413.6
5°	414.4	412.6	408.7	412.2	411.5
7.5°	411.2	409.4	405.5	408.7	408.3
10°	406.9	405.1	400.5	403.7	403.0
12.5°	401.2	399.8	395.5	397.6	397.3
15°	394.4	393.0	388.4	391.2	389.1
17.5°	386.9	385.2	380.5	382.7	382.0
20°	378.4	376.3	371.6	373.1	372.0
22.5°	368.8	366.7	362.0	363.1	361.7
25°	358.1	356.0	351.4	351.7	350.6
27.5°	347.1	344.9	340.0	340.3	339.2
30°	335.0	333.2	328.2	328.2	325.7
32.5°	322.9	320.4	316.8	314.3	313.3
35°	309.7	307.6	302.9	300.8	299.0
37.5°	296.5	293.7	289.1	286.6	285.5
40°	282.6	280.5	275.5	272.7	271.3
42.5°	268.8	266.3	261.3	258.4	257.0
45°	253.8	252.4	247.8	243.5	241.7
47.5°	239.2	237.1	232.8	228.5	227.1
50°	224.3	222.5	217.9	213.9	211.8
52.5°	208.6	207.5	202.6	199.3	197.2
55°	192.6	192.2	187.6	183.7	181.9
57.5°	177.6	176.2	172.6	169.1	167.0
60°	161.3	160.9	156.6	153.4	151.6
62.5°	146.7	145.6	141.3	138.1	137.1
65°	131.4	129.6	126.0	123.2	122.1
67.5°	115.0	113.6	110.7	108.2	106.8
70°	100.4	98.3	96.1	93.6	91.8
72.5°	85.1	83.7	81.2	79.0	78.3
75°	69.4	68.0	66.9	65.1	64.1
77.5°	55.5	54.8	53.4	52.0	52.0
80°	42.0	40.9	40.2	39.9	39.9
82.5°	28.8	28.8	28.8	28.1	27.8
85°	18.5	17.8	17.8	17.1	17.1
87.5°	9.3	8.2	7.8	7.5	7.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)