

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: P243306

Luminaire Tested: **S123DR-H340D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243306
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-49)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DR-H340D935-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1156.6 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.23' x L: 3.88' x H: 0')
CIE Type: Direct

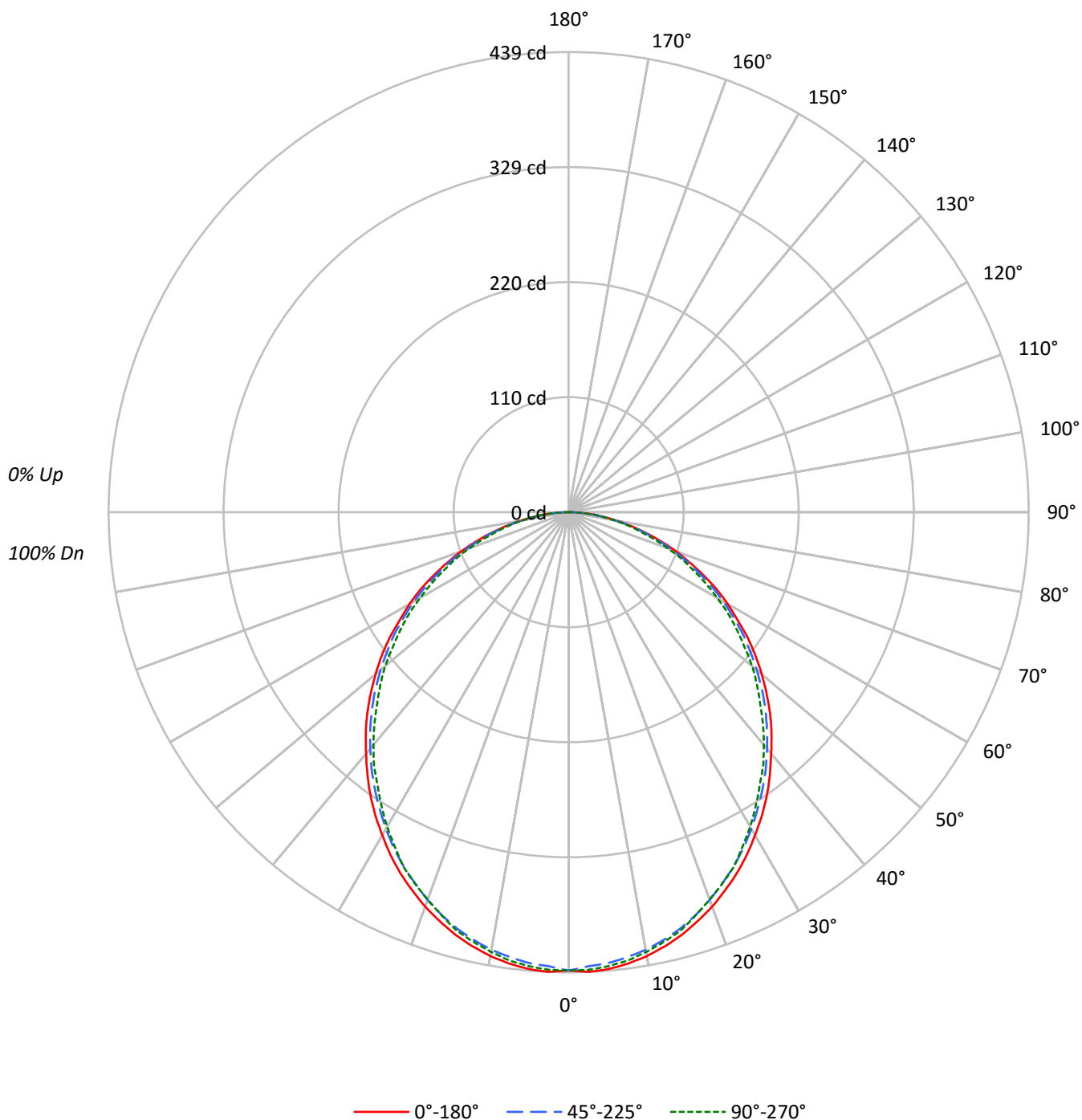
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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CATALOG NUMBER: S123DR-H340D935-X4F0-XX-UDD-F-W

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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	104	100	96	106	102	98	94		97	94	91		94	91	89		90	88	86
2	99	91	84	78	96	89	83	77		85	80	76		82	78	74		79	75	72
3	90	80	72	65	88	78	71	65		75	69	64		73	67	62		70	65	61
4	83	71	62	55	80	70	61	55		67	60	54		65	59	54		63	57	53
5	76	63	54	48	74	62	54	48		60	53	47		58	52	47		56	51	46
6	70	57	48	42	69	56	48	42		54	47	41		53	46	41		51	45	41
7	65	52	43	37	64	51	43	37		50	42	37		48	41	36		47	41	36
8	61	47	39	33	59	47	39	33		45	38	33		44	37	33		43	37	32
9	57	44	35	30	56	43	35	30		42	35	30		41	34	29		40	34	29
10	53	40	32	27	52	40	32	27		39	32	27		38	31	27		37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5299	5299	5299
5°	5325	5254	5289
10°	5293	5217	5243
15°	5238	5161	5184
20°	5166	5077	5072
25°	5081	4985	4990
30°	4980	4883	4848
35°	4880	4774	4704
40°	4756	4660	4586
45°	4659	4548	4429
50°	4533	4418	4309
55°	4402	4288	4144
60°	4247	4133	3966
65°	4064	3938	3774
70°	3859	3728	3576
75°	3578	3480	3292
80°	3218	3148	3043
85°	3004	2851	2754

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.2	3.6
10°-20°	116.6	10.1
20°-30°	172.7	14.9
30°-40°	202.5	17.5
40°-50°	204.8	17.7
50°-60°	181.1	15.7
60°-70°	136.0	11.8
70°-80°	78.4	6.8
80°-90°	23.3	2.0
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°	330.6	28.6
0°-40°	533.1	46.1
0°-60°	919.0	79.5
0°-90°	1156.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1156.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	437	437	437	437	437	
5°	438	436	432	435	435	42
15°	417	415	411	414	413	118
25°	380	377	373	374	373	175
35°	330	327	323	322	318	206
45°	272	270	265	262	258	209
55°	208	207	203	199	196	186
65°	142	141	137	134	132	140
75°	76	76	74	72	70	81
85°	22	21	20	20	20	24
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	437.2	437.2	437.2	437.2	437.2
2.5°	439.0	437.6	433.6	437.6	436.9
5°	437.6	435.8	431.8	435.4	434.7
7.5°	434.3	432.5	428.2	432.2	431.4
10°	430.0	428.2	423.9	427.1	426.0
12.5°	424.2	422.4	418.1	420.6	419.9
15°	417.4	415.2	411.3	414.1	413.1
17.5°	409.1	407.3	403.0	406.6	403.3
20°	400.5	398.6	393.6	396.8	393.2
22.5°	390.4	388.2	383.1	385.3	383.5
25°	379.9	377.0	372.7	374.5	373.1
27.5°	368.4	365.5	361.2	361.9	359.4
30°	355.8	353.2	348.9	349.6	346.4
32.5°	343.1	341.0	335.6	335.6	332.3
35°	329.8	326.9	322.6	321.5	317.9
37.5°	315.4	312.9	308.9	307.1	304.9
40°	300.6	299.2	294.5	292.3	289.8
42.5°	286.6	284.0	280.1	277.2	274.3
45°	271.8	269.6	265.3	261.7	258.4
47.5°	256.3	254.5	250.1	246.2	243.7
50°	240.4	239.0	234.3	230.0	228.5
52.5°	224.9	223.1	218.4	214.5	211.6
55°	208.3	206.9	202.9	199.0	196.1
57.5°	190.7	190.7	186.3	182.7	180.6
60°	175.2	173.4	170.5	166.5	163.6
62.5°	159.0	157.9	153.9	149.9	147.8
65°	141.7	140.6	137.3	133.7	131.6
67.5°	124.7	124.4	121.5	118.6	117.1
70°	108.9	108.1	105.2	102.4	100.9
72.5°	92.6	91.9	89.4	86.9	85.1
75°	76.4	75.7	74.3	72.1	70.3
77.5°	60.6	60.6	58.8	58.0	57.3
80°	46.1	45.8	45.1	44.3	43.6
82.5°	33.2	32.8	32.1	31.7	31.7
85°	21.6	21.3	20.5	20.2	19.8
87.5°	11.2	10.5	10.1	9.4	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)