

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: P242446

Luminaire Tested: **S123DR-S340D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242446
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-S340D935-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1137.9 lumens
Efficiency: N/A
Efficacy: 98.1 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

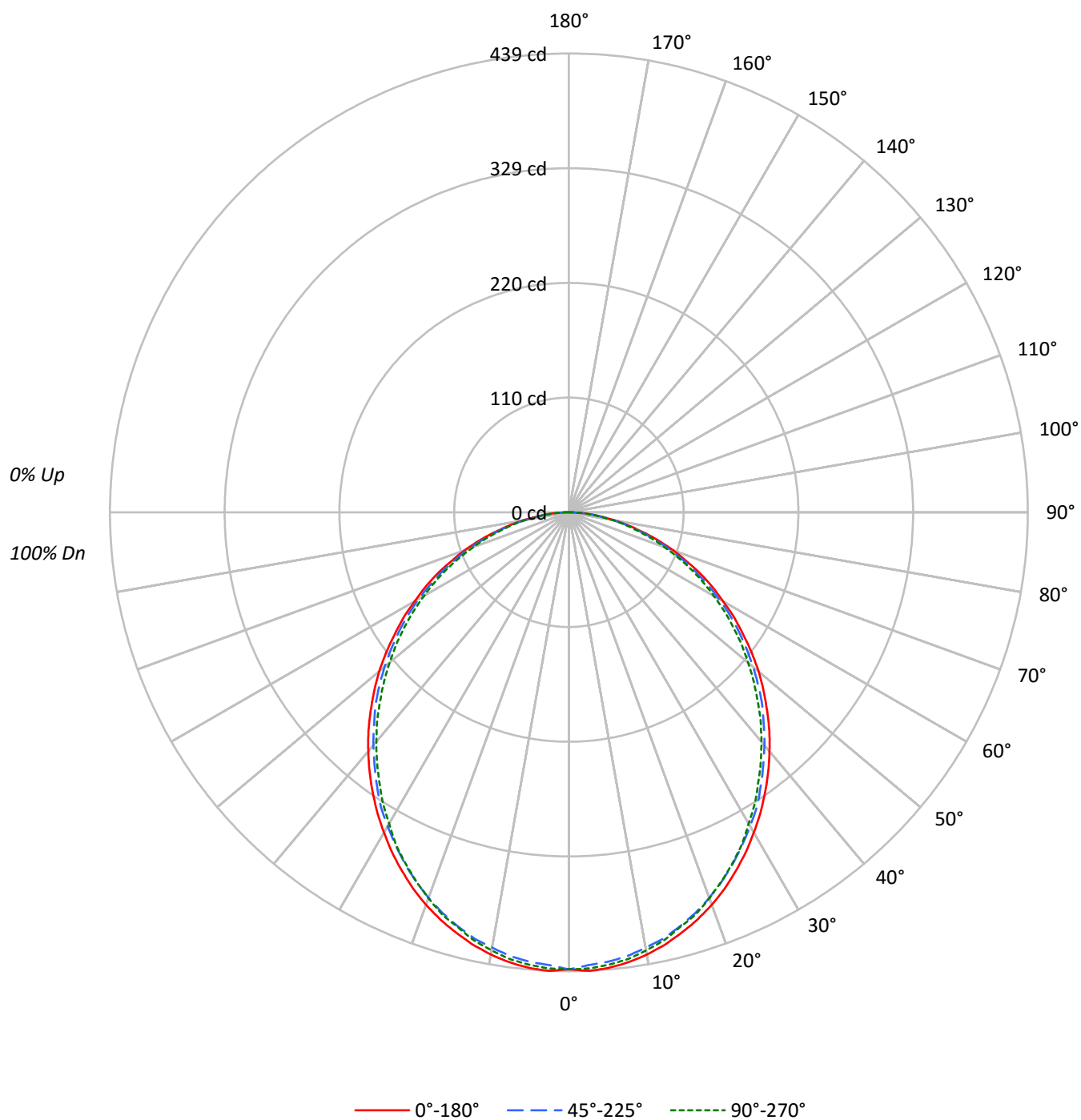
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5299	5299	5299
5°	5325	5252	5288
10°	5289	5205	5238
15°	5227	5146	5156
20°	5154	5063	5067
25°	5058	4962	4952
30°	4952	4851	4815
35°	4840	4734	4673
40°	4723	4605	4533
45°	4594	4484	4376
50°	4465	4339	4218
55°	4298	4186	4060
60°	4128	4010	3881
65°	3978	3817	3697
70°	3757	3597	3438
75°	3433	3311	3171
80°	3099	2967	2939
85°	2712	2615	2503

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.2	3.6
10°-20°	116.4	10.2
20°-30°	171.9	15.1
30°-40°	200.7	17.6
40°-50°	201.8	17.7
50°-60°	177.3	15.6
60°-70°	132.0	11.6
70°-80°	75.1	6.6
80°-90°	21.4	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°	329.5	29.0
0°-40°	530.2	46.6
0°-60°	909.3	79.9
0°-90°	1137.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1137.9	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°	416	415	410	413	411	117
25°	378	376	371	371	370	174
35°	327	325	320	318	316	205
45°	268	266	262	257	255	207
55°	203	203	198	194	192	182
65°	139	137	133	130	129	137
75°	73	72	71	69	68	78
85°	20	19	19	18	18	22
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°	439.1	437.6	433.5	437.2	436.8
5°	437.6	435.7	431.6	435.3	434.6
7.5°	434.2	432.3	428.2	431.6	431.2
10°	429.7	427.8	422.9	426.3	425.6
12.5°	423.7	422.2	417.7	419.9	419.5
15°	416.5	415.0	410.1	413.1	410.9
17.5°	408.6	406.8	401.9	404.1	403.4
20°	399.6	397.4	392.5	394.0	392.8
22.5°	389.5	387.2	382.3	383.5	381.9
25°	378.2	375.9	371.0	371.4	370.3
27.5°	366.5	364.3	359.0	359.4	358.3
30°	353.8	351.9	346.6	346.6	344.0
32.5°	341.0	338.3	334.6	331.9	330.8
35°	327.1	324.8	319.9	317.7	315.8
37.5°	313.2	310.1	305.3	302.6	301.5
40°	298.5	296.2	291.0	288.0	286.5
42.5°	283.8	281.2	275.9	272.9	271.4
45°	268.0	266.5	261.6	257.1	255.3
47.5°	252.6	250.4	245.9	241.3	239.8
50°	236.8	235.0	230.1	225.9	223.7
52.5°	220.3	219.2	213.9	210.5	208.3
55°	203.4	203.0	198.1	194.0	192.1
57.5°	187.6	186.1	182.3	178.6	176.3
60°	170.3	169.9	165.4	162.0	160.1
62.5°	154.9	153.8	149.2	145.9	144.7
65°	138.7	136.8	133.1	130.1	128.9
67.5°	121.4	119.9	116.9	114.3	112.8
70°	106.0	103.8	101.5	98.9	97.0
72.5°	89.8	88.3	85.7	83.5	82.7
75°	73.3	71.8	70.7	68.8	67.7
77.5°	58.6	57.9	56.4	54.9	54.9
80°	44.4	43.2	42.5	42.1	42.1
82.5°	30.5	30.5	30.5	29.7	29.3
85°	19.5	18.8	18.8	18.0	18.0
87.5°	9.8	8.6	8.3	7.9	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)