

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: P231681

Luminaire Tested: **S123-DR-1-35-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231681
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29683)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123-DR-1-35-X-0048-1-U-DD-1-W
Description: DEFINE 3 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2899.2 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.22' x L: 3.92' x H: 0')
CIE Type: Direct

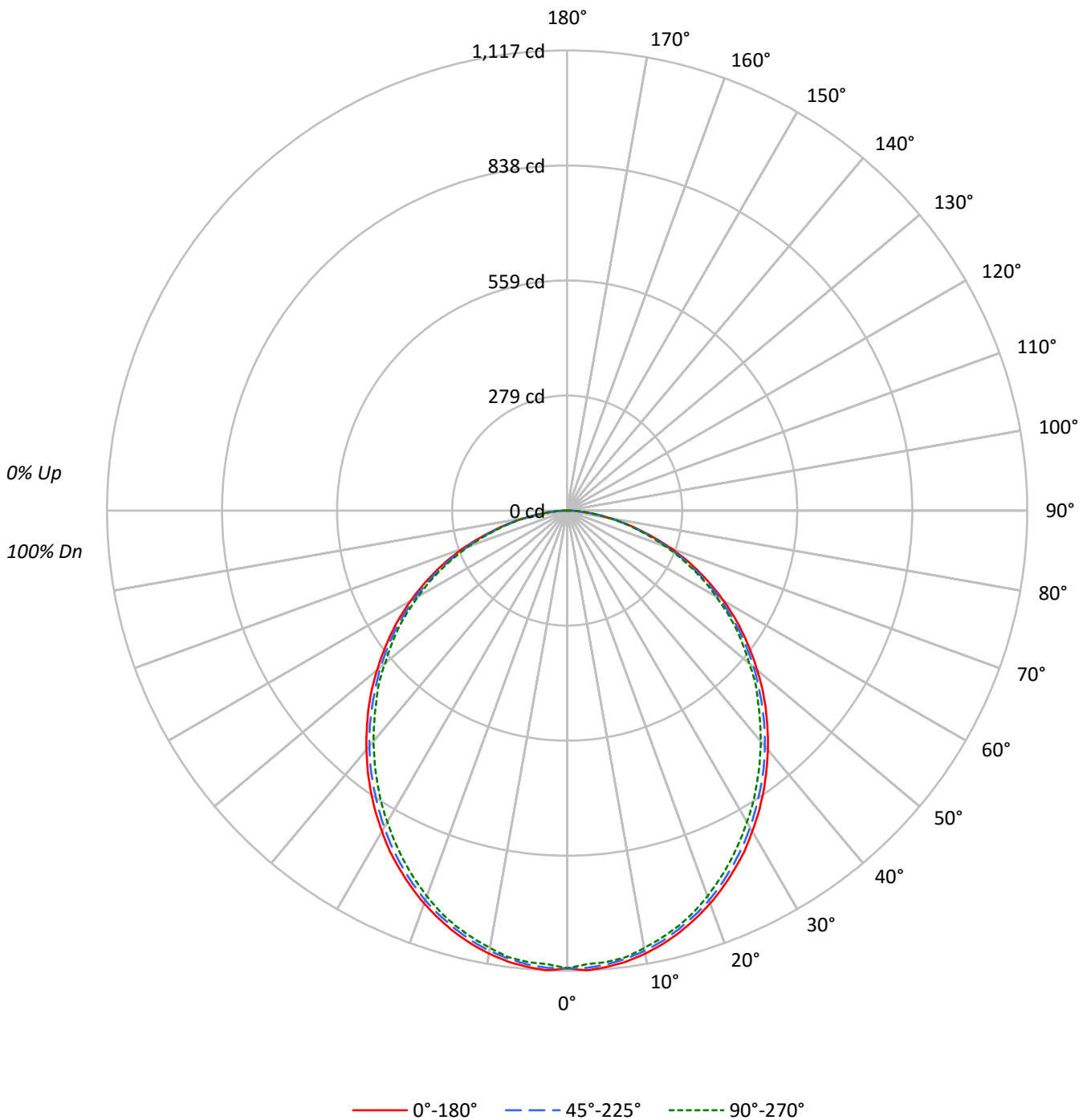
Input Watts (W): 27.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	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					100			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70					70			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59					59			
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51					51			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44					44			
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39					39			
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28					28			
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13673	13673	13673
5°	13738	13664	13590
10°	13647	13559	13472
15°	13493	13391	13302
20°	13294	13189	13045
25°	13050	12914	12738
30°	12776	12620	12406
35°	12485	12305	12080
40°	12178	12001	11744
45°	11870	11644	11400
50°	11526	11316	11048
55°	11201	10965	10750
60°	10806	10535	10264
65°	10338	10018	9814
70°	9680	9356	9140
75°	8654	8464	8274
80°	7371	7371	7371
85°	5931	6213	6213



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.7	3.6
10°-20°	295.6	10.2
20°-30°	436.4	15.1
30°-40°	510.4	17.6
40°-50°	515.1	17.8
50°-60°	455.7	15.7
60°-70°	341.0	11.8
70°-80°	189.4	6.5
80°-90°	50.9	1.8
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°	836.7	28.9
0°-40°	1347.1	46.5
0°-60°	2317.9	80.0
0°-90°	2899.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2899.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1111	1111	1111	1111	1111	
5°	1112	1101	1106	1102	1100	106
15°	1059	1047	1051	1047	1044	298
25°	961	949	951	941	938	443
35°	831	820	819	807	804	520
45°	682	673	669	658	655	526
55°	522	517	511	501	501	466
65°	355	350	344	339	337	351
75°	182	180	178	175	174	194
85°	42	44	44	43	44	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1111	1111	1111	1111	1111
2.5°	1117	1105	1111	1108	1102
5°	1112	1101	1106	1102	1100
7.5°	1104	1092	1097	1093	1093
10°	1092	1080	1085	1080	1078
12.5°	1077	1065	1070	1064	1062
15°	1059	1047	1051	1047	1044
17.5°	1038	1027	1030	1025	1022
20°	1015	1003	1007	999	996
22.5°	989	977	980	970	968
25°	961	949	951	941	938
27.5°	932	919	921	910	906
30°	899	887	888	877	873
32.5°	866	854	854	842	840
35°	831	820	819	807	804
37.5°	795	785	784	771	768
40°	758	749	747	734	731
42.5°	720	711	709	696	693
45°	682	673	669	658	655
47.5°	643	636	630	620	620
50°	602	596	591	581	577
52.5°	562	557	551	542	539
55°	522	517	511	501	501
57.5°	481	475	469	462	460
60°	439	434	428	421	417
62.5°	397	393	387	381	379
65°	355	350	344	339	337
67.5°	313	307	302	297	296
70°	269	264	260	254	254
72.5°	224	220	218	215	214
75°	182	180	178	175	174
77.5°	142	142	140	139	139
80°	104	106	104	104	104
82.5°	70	71	72	72	71
85°	42	44	44	43	44
87.5°	20	20	20	20	20
90°	0	0	0	0	0

(END OF REPORT)