

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: P33909

Luminaire Tested: **S122DS-135-SR0048-1D-UDD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P33909
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DS-135-SR0048-1D-UDD-1-W
Description: NEORAY DIRECT- INDIRECT 2" FIXTURE WITH A FLUSH DIFFUSE
LENS.LL1
Light Source: [117] NICHIA 3500K LED
Nichia 757D
Ballast/Driver: [1] OSRAM SYLVANIA ELECTRONIC DRIVER
OT50WPRG1400C

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2218.9 lumens
Efficiency: N/A
Efficacy: 79.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

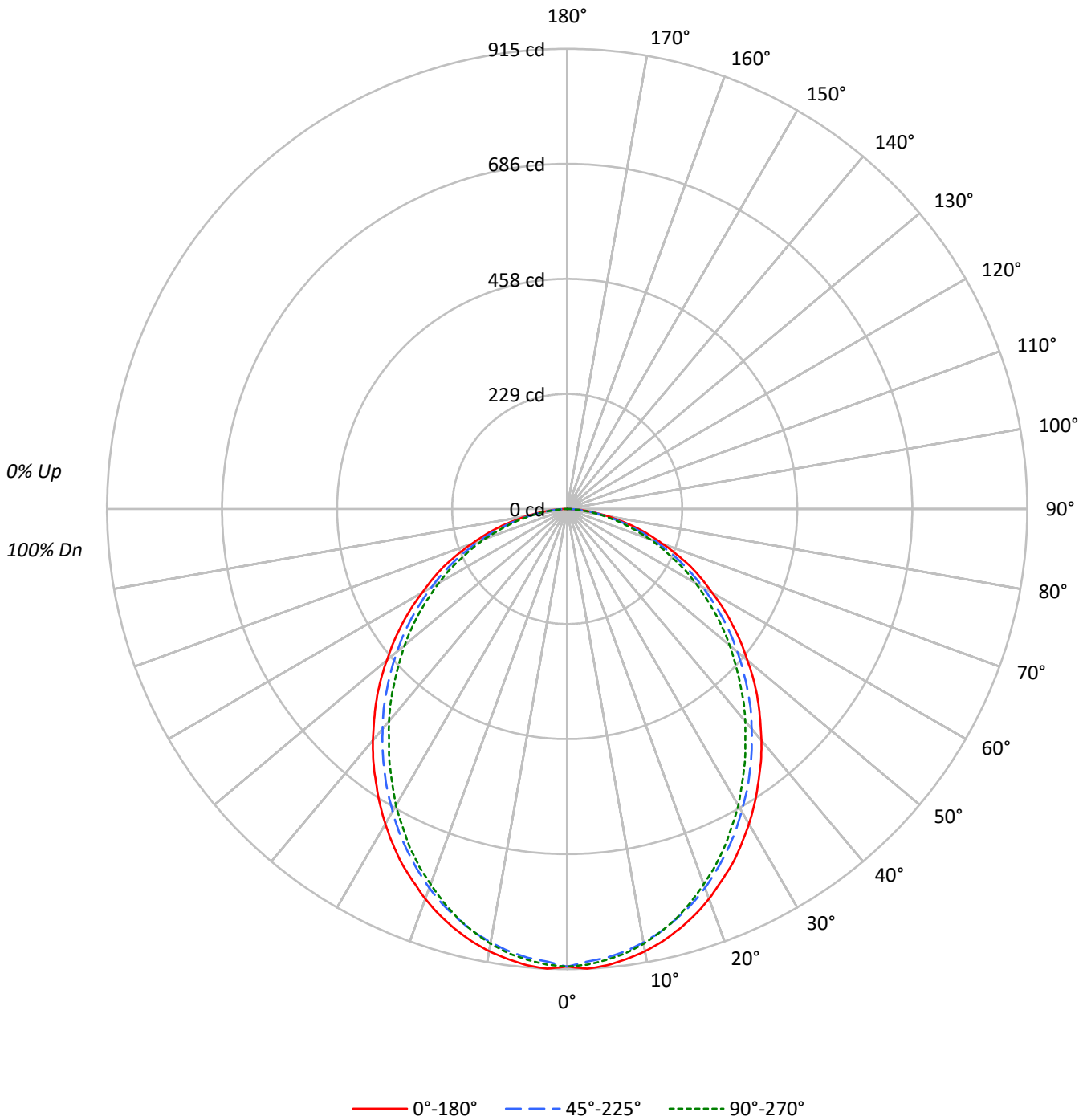
Input Watts (W): 27.9
Input Voltage (V): 120.02
Input Current (Ain): 0.2339
Voltage Rise (V): NR
Power Factor: 0.9971
Total Harmonic Distortion (THDi): 7.69%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85				85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71				71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61				61
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52				52
5	77	65	56	49	75	63	55	49	61	54	48	59	53	48	58	52	47	45				45
6	71	58	50	43	69	57	49	43	56	48	43	54	47	42	52	46	42	40				40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	35				35
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32				32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29				29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26				26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14693	14693	14693
5°	14765	14522	14587
10°	14641	14346	14395
15°	14442	14091	14074
20°	14175	13780	13643
25°	13860	13379	13201
30°	13479	12939	12696
35°	13068	12496	12142
40°	12667	12035	11613
45°	12239	11577	11074
50°	11755	11102	10600
55°	11288	10612	10077
60°	10753	10075	9526
65°	10353	9513	8863
70°	9489	8781	8214
75°	8734	7860	7299
80°	7438	6788	6323
85°	6113	5372	4817



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.5	3.9
10°-20°	239.1	10.8
20°-30°	347.9	15.7
30°-40°	398.5	18.0
40°-50°	392.5	17.7
50°-60°	338.5	15.3
60°-70°	247.4	11.1
70°-80°	135.0	6.1
80°-90°	34.5	1.6
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°	672.5	30.3
0°-40°	1071.0	48.3
0°-60°	1802.0	81.2
0°-90°	2218.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2218.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	910	910	910	910	910	
5°	911	906	896	902	900	86
15°	864	856	843	845	842	243
25°	778	768	751	747	741	358
35°	663	653	634	622	616	415
45°	536	525	507	493	485	413
55°	401	395	377	363	358	359
65°	271	262	249	238	232	266
75°	140	133	126	120	117	147
85°	33	31	29	27	26	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	910	910	910	910	910
2.5°	915	911	901	909	907
5°	911	906	896	902	900
7.5°	903	898	887	893	891
10°	893	886	875	880	878
12.5°	880	872	861	865	861
15°	864	856	843	845	842
17.5°	846	837	824	824	819
20°	825	816	802	799	794
22.5°	801	792	777	775	769
25°	778	768	751	747	741
27.5°	751	741	724	716	710
30°	723	712	694	687	681
32.5°	694	684	665	655	647
35°	663	653	634	622	616
37.5°	633	621	603	590	582
40°	601	589	571	558	551
42.5°	568	557	540	525	519
45°	536	525	507	493	485
47.5°	503	492	474	459	453
50°	468	460	442	427	422
52.5°	435	427	410	395	390
55°	401	395	377	363	358
57.5°	368	361	344	332	325
60°	333	327	312	300	295
62.5°	302	295	280	269	265
65°	271	262	249	238	232
67.5°	235	230	217	206	204
70°	201	196	186	177	174
72.5°	171	165	155	148	144
75°	140	133	126	120	117
77.5°	108	105	98	93	91
80°	80	78	73	68	68
82.5°	56	53	49	46	45
85°	33	31	29	27	26
87.5°	14	13	11	10	9
90°	0	0	0	0	0

(END OF REPORT)