

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: P33922

Luminaire Tested: **S122DS-235-SR0048-1D-UDD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P33922
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DS-235-SR0048-1D-UDD-1-W
Description: NEORAY DIRECT- INDIRECT 2" FIXTURE WITH A FLUSH DIFFUSE LENS.LL2
Light Source: [117] NICHIA 3500K LED
Nichia 757D
Ballast/Driver: [1] OSRAM SYLVANIA ELECTRONIC DRIVER
OT48WPRG2000C

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3151.0 lumens
Efficiency: N/A
Efficacy: 70.7 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

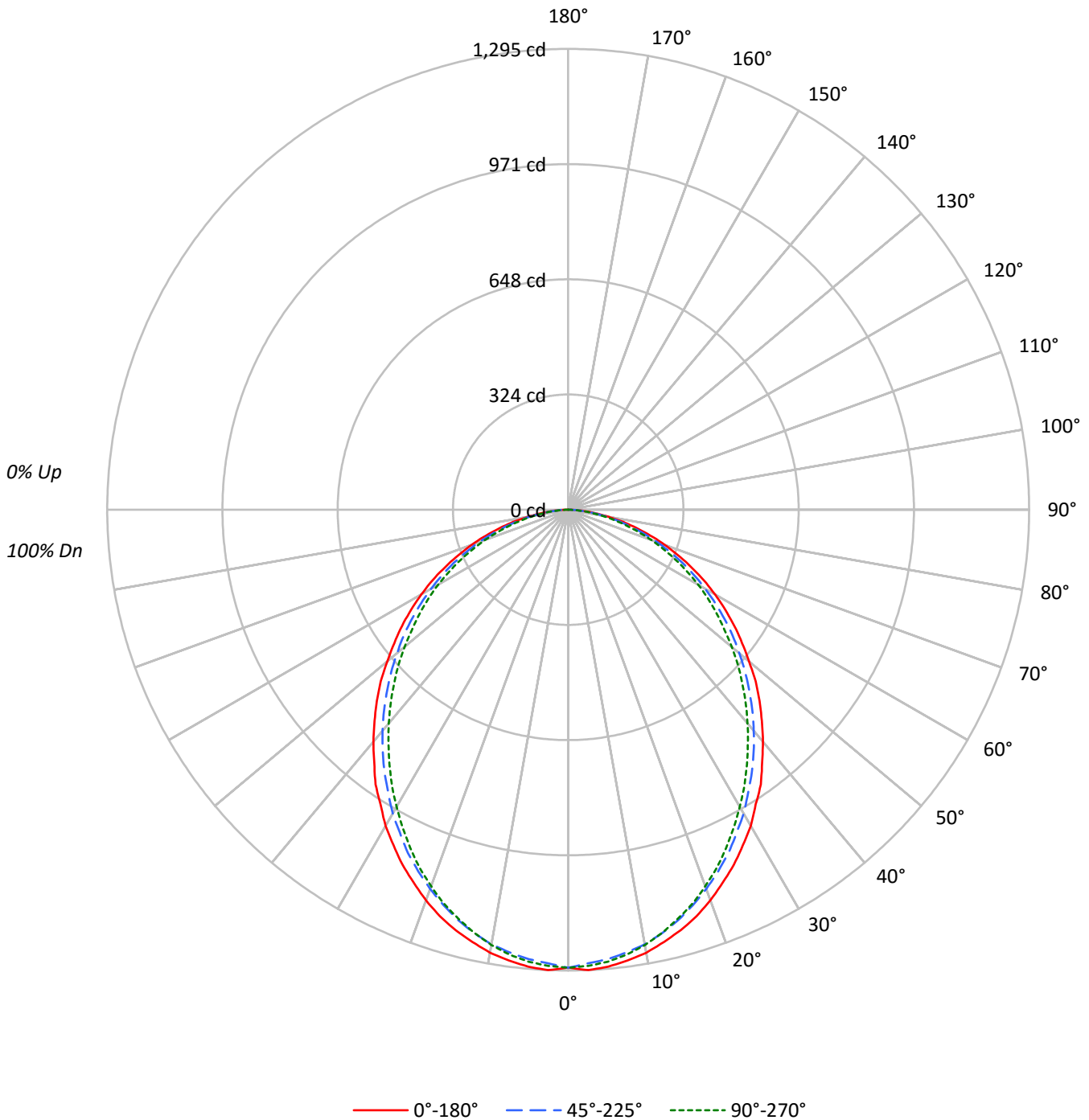
Input Watts (W): 44.6
Input Voltage (V): 120.02
Input Current (A_{in}): 3733
Voltage Rise (V): NR
Power Factor: 0.9989
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 13 HR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85					85			
2	100	92	85	79	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	66	63	60					60			
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52					52			
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45					45			
6	71	58	49	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	36	31	56	44	36	31	43	36	31	42	35	31	41	35	30	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°	20780	20780	20780
5°	20891	20551	20665
10°	20723	20330	20362
15°	20443	19958	19891
20°	20069	19484	19347
25°	19614	18973	18688
30°	19128	18383	17972
35°	18587	17739	17247
40°	17936	17093	16524
45°	17354	16417	15801
50°	16654	15749	15071
55°	16045	15088	14356
60°	15371	14370	13627
65°	14556	13563	12722
70°	13643	12557	11707
75°	12289	11229	10418
80°	10600	9670	8926
85°	8522	7595	7225



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.0	3.8
10°-20°	338.5	10.7
20°-30°	492.7	15.6
30°-40°	565.3	17.9
40°-50°	557.7	17.7
50°-60°	481.5	15.3
60°-70°	352.1	11.2
70°-80°	192.9	6.1
80°-90°	49.4	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°	952.2	30.2
0°-40°	1517.5	48.2
0°-60°	2556.7	81.1
0°-90°	3151.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3151.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1287	1287	1287	1287	1287	
5°	1289	1281	1268	1278	1275	122
15°	1223	1212	1194	1197	1190	345
25°	1101	1087	1065	1058	1049	507
35°	943	925	900	884	875	588
45°	760	745	719	700	692	586
55°	570	560	536	517	510	509
65°	381	371	355	340	333	378
75°	197	190	180	171	167	211
85°	46	44	41	38	39	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1287	1287	1287	1287	1287
2.5°	1295	1288	1276	1286	1283
5°	1289	1281	1268	1278	1275
7.5°	1278	1269	1255	1264	1261
10°	1264	1253	1240	1246	1242
12.5°	1244	1235	1219	1224	1218
15°	1223	1212	1194	1197	1190
17.5°	1198	1185	1165	1167	1161
20°	1168	1154	1134	1133	1126
22.5°	1134	1121	1100	1095	1090
25°	1101	1087	1065	1058	1049
27.5°	1063	1050	1024	1015	1007
30°	1026	1009	986	973	964
32.5°	981	968	941	929	921
35°	943	925	900	884	875
37.5°	895	881	856	838	829
40°	851	834	811	794	784
42.5°	805	790	766	747	738
45°	760	745	719	700	692
47.5°	714	699	674	655	647
50°	663	652	627	611	600
52.5°	616	606	583	563	553
55°	570	560	536	517	510
57.5°	523	513	490	473	466
60°	476	465	445	428	422
62.5°	430	420	399	383	376
65°	381	371	355	340	333
67.5°	333	324	308	296	289
70°	289	279	266	252	248
72.5°	242	235	222	213	206
75°	197	190	180	171	167
77.5°	158	149	141	134	130
80°	114	110	104	99	96
82.5°	78	75	71	67	64
85°	46	44	41	38	39
87.5°	21	19	16	15	14
90°	0	0	0	0	0

(END OF REPORT)