

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P24876

Luminaire Tested: 23XR-2-L35-ETG4D-1DD-SI

Test Date: 09/16/14



Test Information

Test Method: LM-79-2019
Report Number: P24876
Test Lab: INNOVATION CENTER-P2
Test Date: 09/16/14
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: 23XR-2-L35-ETG4D-1DD-SI
Description: NEORAY; ASYMMETRIC LINEAR SLOT LED (1.6A)
Light Source: (98) 3500K LEDS
Ballast/Driver: (1) LG ELECTRONIC DRIVER
CLUNVCC200024VD010

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2839.3 lumens
Efficiency: N/A
Efficacy: 76.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.37
Luminous Opening: Rectangular (W 2' x L: 0.19' x H: 0')
CIE Type: Direct

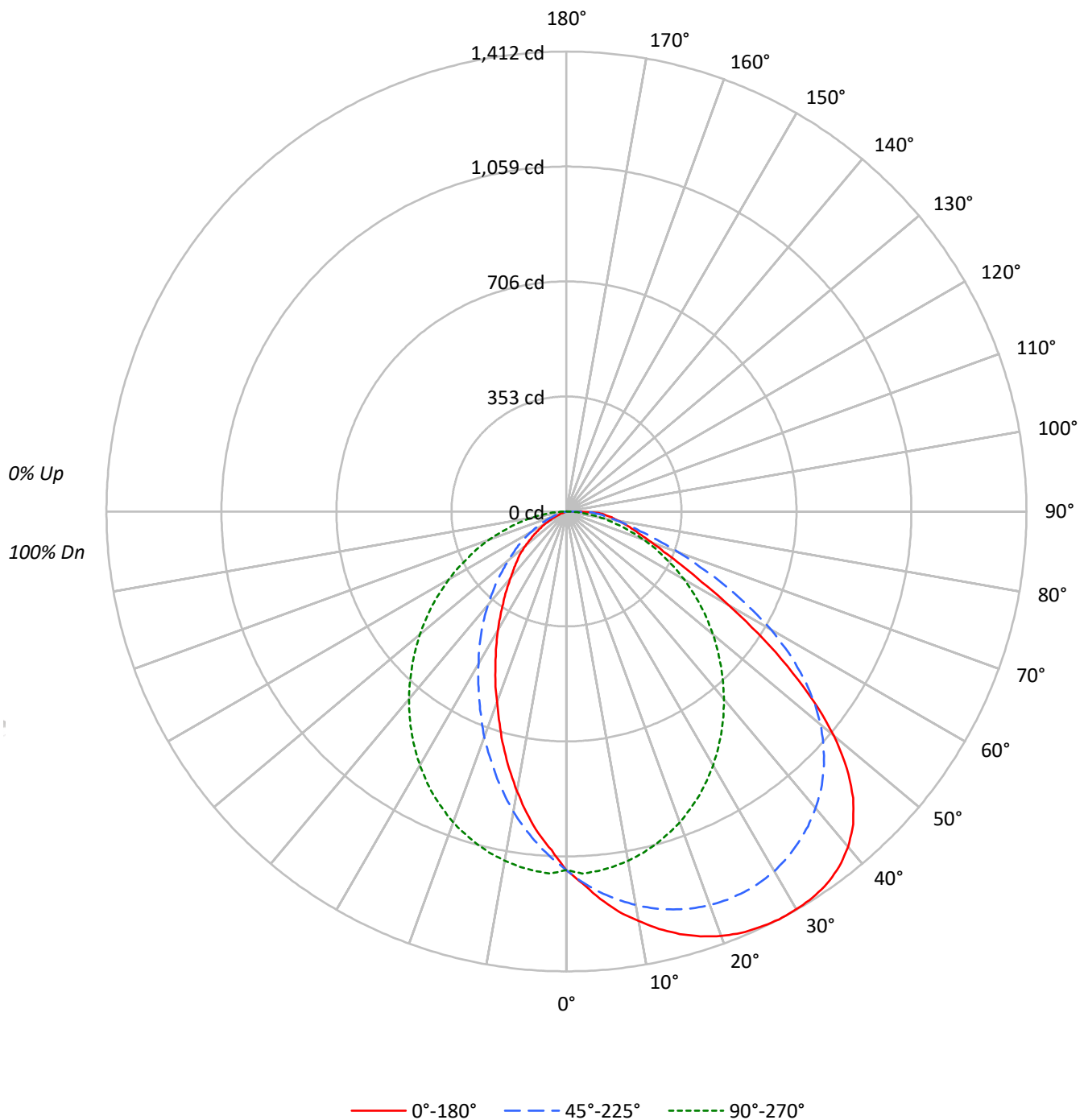
Input Watts (W): 37.3
Input Voltage (V): 120.07
Input Current (Ain): 0.31564
Voltage Rise (V): NR
Power Factor: 0.9972
Total Harmonic Distortion (THDi): 6.16
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: HR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87
2	100	92	85	80	97	90	84	79	87	82	77	83	79	75	80	77	74
3	91	81	73	67	89	80	72	67	77	71	65	74	69	64	71	67	63
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48
6	71	58	50	43	70	58	49	43	56	48	43	54	48	43	53	47	42
7	66	53	45	38	65	52	44	38	51	43	38	49	43	38	48	42	38
8	62	49	40	34	60	48	40	34	47	39	34	45	39	34	44	38	34
9	58	45	36	31	56	44	36	31	43	36	31	42	35	31	41	35	30
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	31603	31603	31603	31603	31603
5°	34403	33798	31925	29505	28583
10°	37220	35763	31741	27281	25416
15°	39909	37591	31440	24873	22198
20°	42367	39313	31035	22512	19030
25°	44593	40856	30499	20079	16311
30°	46767	42292	29830	17898	13887
35°	48882	43486	29049	15979	11774
40°	50397	44589	28178	14014	10005
45°	50539	45343	27197	12097	8687
50°	47870	45459	26213	10271	7323
55°	41436	44389	25122	8808	5755
60°	32952	41563	23882	7119	4191
65°	26217	36337	22481	5230	2445
70°	23247	30632	20981	3189	420
75°	23401	25951	19075	555	0
80°	26448	25621	17026	0	0
85°	38862	33263	14162	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 87.5°

Luminance: 64489 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.1	3.7
10°-20°	295.5	10.4
20°-30°	441.8	15.6
30°-40°	527.6	18.6
40°-50°	538.4	19.0
50°-60°	450.0	15.8
60°-70°	286.6	10.1
70°-80°	142.7	5.0
80°-90°	52.8	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°	841.3	29.6
0°-40°	1368.9	48.2
0°-60°	2357.3	83.0
0°-90°	2839.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2839.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1101	1101	1101	1101	1101	
5°	1194	1173	1108	1024	992	116
15°	1343	1265	1058	837	747	381
25°	1408	1290	963	634	515	651
35°	1395	1241	829	456	336	871
45°	1245	1117	670	298	214	951
55°	828	887	502	176	115	737
65°	386	535	331	77	36	396
75°	211	234	172	5	0	226
85°	118	101	43	0	0	119
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1101	1101	1101	1101	1101	1101	1101	1101	1101
2.5°	1143	1148	1140	1116	1113	1076	1064	1048	1041
5°	1194	1191	1173	1132	1108	1052	1024	996	992
7.5°	1240	1230	1202	1144	1100	1025	982	945	934
10°	1277	1264	1227	1152	1089	995	936	887	872
12.5°	1313	1296	1249	1157	1075	963	888	829	810
15°	1343	1323	1265	1158	1058	929	837	770	747
17.5°	1368	1344	1278	1156	1038	892	786	709	683
20°	1387	1357	1287	1150	1016	855	737	649	623
22.5°	1401	1368	1290	1141	990	816	684	593	570
25°	1408	1374	1290	1128	963	774	634	544	515
27.5°	1412	1375	1285	1111	932	734	585	497	466
30°	1411	1371	1276	1091	900	690	540	448	419
32.5°	1406	1363	1261	1067	865	648	498	406	376
35°	1395	1349	1241	1040	829	605	456	363	336
37.5°	1375	1329	1218	1010	791	563	415	324	300
40°	1345	1302	1190	976	752	522	374	289	267
42.5°	1303	1263	1157	938	711	481	335	257	239
45°	1245	1214	1117	898	670	442	298	230	214
47.5°	1168	1150	1071	856	629	405	263	205	192
50°	1072	1071	1018	811	587	369	230	179	164
52.5°	957	978	957	764	544	332	202	153	139
55°	828	863	887	715	502	297	176	128	115
57.5°	696	744	809	664	459	263	150	104	93
60°	574	629	724	612	416	228	124	83	73
62.5°	468	520	629	557	375	193	100	64	54
65°	386	425	535	503	331	160	77	45	36
67.5°	324	354	444	449	292	131	58	28	20
70°	277	294	365	389	250	101	38	12	5
72.5°	240	250	293	331	210	74	21	0	0
75°	211	213	234	272	172	50	5	0	0
77.5°	185	184	190	216	136	29	0	0	0
80°	160	159	155	164	103	12	0	0	0
82.5°	140	136	126	119	72	0	0	0	0
85°	118	114	101	82	43	0	0	0	0
87.5°	98	94	79	53	17	0	0	0	0
90°	0	0	0	0	0	0	0	0	0

(END OF REPORT)