

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: METALUX

Report Number: P29460

Luminaire Tested: **4SHP3240R**

Test Date: 05/22/17



**Test Information**

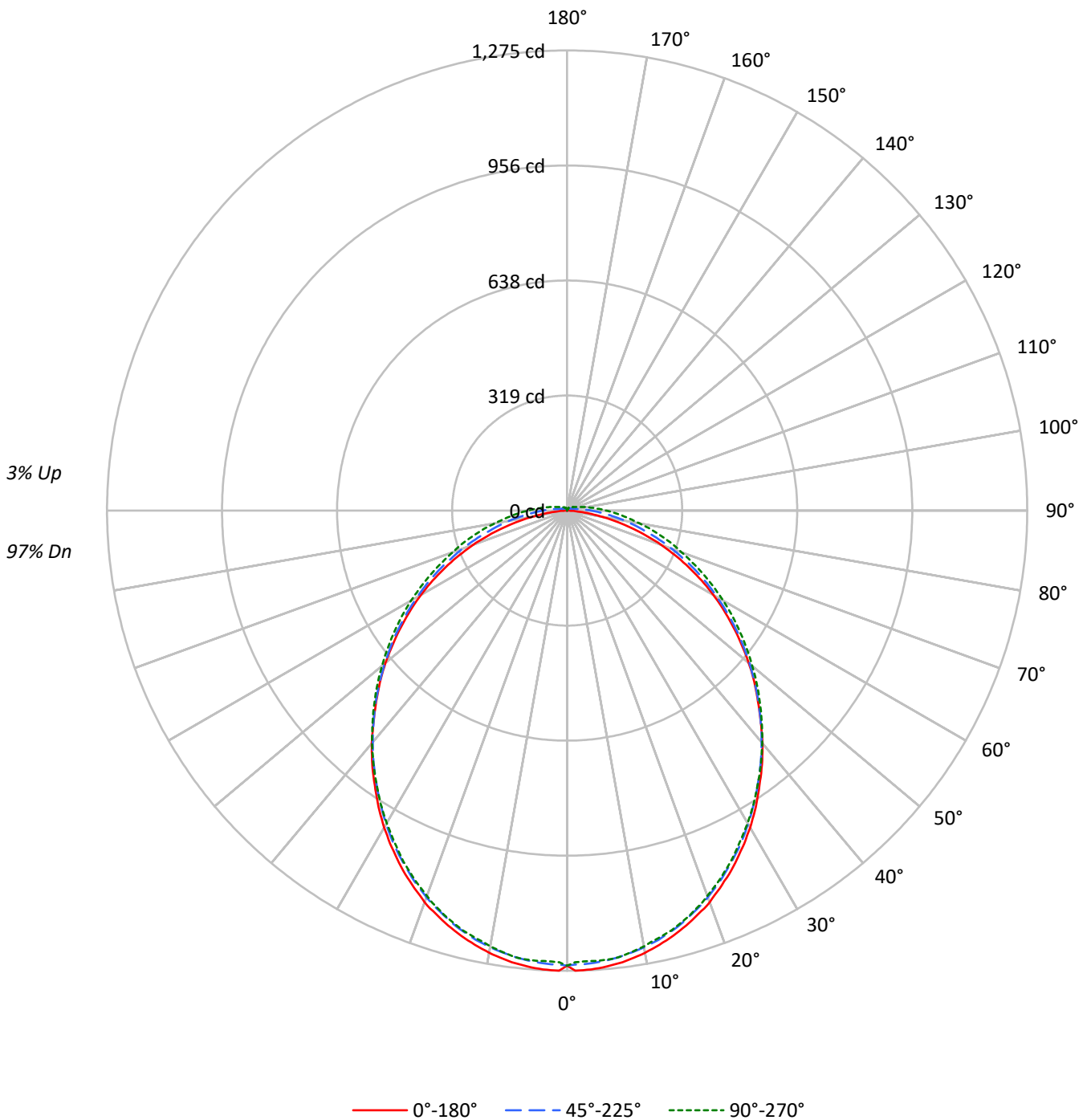
Test Method: LM-79-08  
Report Number: P29460  
Test Lab: INNOVATION CENTER-P2  
Test Date: 05/22/17  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SHP3240R  
Description: 4FT LED SHOPLIGHT, 3200 LUMEN, 4000K  
Light Source: (270) REFOND 4000K LEDS  
RT-40HI32DS-EF-N-Y  
Ballast/Driver: (1) 120V ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3459.8 lumens  
Efficiency: N/A  
Efficacy: 109.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 3.5' x H: 0.08')  
CIE Type: Direct  
  
Input Watts (W): 31.6  
Input Voltage (V): 120.0  
Input Current (A<sub>in</sub>): 0.270  
Voltage Rise (V): NR  
Power Factor: 0.9916  
Total Harmonic Distortion (THDi): 17.8%  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 24 HR  
Ambient Temperature (°C): 25.2  
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	0
RCR																		
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	97
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	80
2	98	89	83	77	95	87	81	76	83	78	73	80	75	71	76	72	69	67
3	89	79	70	64	87	77	69	63	73	67	62	70	65	60	67	63	59	56
4	82	70	61	54	79	68	60	54	65	58	53	63	57	52	60	55	51	48
5	75	62	53	47	73	61	53	46	59	51	46	56	50	45	54	49	44	42
6	70	56	47	41	67	55	47	41	53	46	40	51	45	39	49	43	39	37
7	65	51	42	36	63	50	42	36	48	41	36	47	40	35	45	39	35	33
8	60	47	38	32	58	46	38	32	44	37	32	43	36	31	41	36	31	29
9	56	43	35	29	55	42	34	29	41	34	29	40	33	28	38	32	28	26
10	53	40	32	27	51	39	31	26	38	31	26	37	30	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	23268	23268	23268
5°	23438	22445	22165
10°	23211	21616	21110
15°	22874	20715	20030
20°	22485	19726	18873
25°	21929	18681	17716
30°	21312	17606	16534
35°	20584	16492	15383
40°	19885	15400	14271
45°	19066	14282	13152
50°	18340	13144	12052
55°	17485	11993	10961
60°	16587	10791	9869
65°	15453	9563	8765
70°	14027	8236	7659
75°	11917	6823	6667
80°	9081	5586	5624
85°	4993	4288	4761



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.8	3.4
10°-20°	335.8	9.7
20°-30°	495.2	14.3
30°-40°	576.8	16.7
40°-50°	578.3	16.7
50°-60°	510.7	14.8
60°-70°	389.5	11.3
70°-80°	242.0	7.0
80°-90°	112.0	3.2
90°-100°	44.7	1.3
100°-110°	20.9	0.6
110°-120°	12.7	0.4
120°-130°	8.9	0.3
130°-140°	6.2	0.2
140°-150°	4.0	0.1
150°-160°	2.3	0.1
160°-170°	1.0	0.0
170°-180°	0.1	0.0
0°-30°	949.8	27.5
0°-40°	1526.6	44.1
0°-60°	2615.6	75.6
0°-90°	3359.0	97.1
90°-120°	78.3	2.3
90°-150°	97.4	2.8
90°-180°	101.0	2.9
0°-180°	3459.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1261	1261	1261	1261	1261	
5°	1268	1249	1251	1250	1249	120
15°	1205	1188	1192	1191	1189	340
25°	1089	1073	1076	1073	1073	501
35°	929	917	922	923	922	582
45°	748	743	750	753	756	578
55°	562	560	570	580	584	503
65°	372	375	393	411	416	368
75°	182	195	228	262	268	194
85°	30	61	106	139	151	39
90°	0	26	67	97	108	1
95°	0	11	41	67	77	0
105°	0	6	18	33	39	0
115°	1	6	13	20	23	0
125°	1	5	11	15	17	1
135°	1	5	9	12	13	1
145°	2	4	7	9	10	1
155°	2	4	5	6	7	1
165°	3	3	4	4	5	1
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1261	1261	1261	1261	1261
1°	1275	1255	1258	1259	1252
2°	1274	1255	1258	1257	1250
3°	1273	1253	1256	1256	1250
4°	1271	1252	1254	1253	1250
5°	1268	1249	1251	1250	1249
6°	1264	1246	1248	1247	1248
7°	1261	1242	1244	1244	1244
8°	1255	1237	1239	1239	1238
9°	1250	1232	1234	1234	1232
10°	1244	1226	1229	1228	1226
11°	1237	1220	1222	1221	1218
12°	1230	1212	1216	1214	1212
13°	1222	1205	1208	1207	1205
14°	1214	1197	1200	1199	1198
15°	1205	1188	1192	1191	1189
16°	1196	1179	1182	1182	1180
17°	1186	1169	1172	1172	1170
18°	1175	1159	1162	1161	1159
19°	1166	1148	1152	1150	1149
20°	1155	1136	1140	1137	1136
21°	1141	1125	1128	1125	1124
22°	1129	1112	1116	1112	1112
23°	1115	1100	1103	1099	1099
24°	1103	1087	1089	1086	1086
25°	1089	1073	1076	1073	1073
26°	1074	1059	1062	1061	1058
27°	1059	1043	1048	1046	1043
28°	1045	1029	1034	1032	1029
29°	1029	1014	1018	1017	1014
30°	1014	998	1003	1002	1000
32.5°	973	959	963	963	962
35°	929	917	922	923	922
37.5°	887	875	881	882	882
40°	842	832	838	838	841
42.5°	794	787	794	795	798
45°	748	743	750	753	756
47.5°	703	697	705	711	713
50°	657	652	660	667	670
52.5°	609	606	615	623	627
55°	562	560	570	580	584
57.5°	515	514	525	538	542
60°	468	467	480	495	499
62.5°	420	421	437	453	457
65°	372	375	393	411	416



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	324	328	349	370	375
70°	277	282	308	331	337
72.5°	229	239	267	294	305
75°	182	195	228	262	268
77.5°	138	156	194	227	237
80°	97	119	163	194	203
82.5°	61	87	132	164	175
85°	30	61	106	139	151
87.5°	9	41	85	117	129
90°	0	26	67	97	108
92.5°	0	17	52	81	91
95°	0	11	41	67	77
97.5°	0	9	32	55	63
100°	0	7	26	45	54
102.5°	0	7	22	38	45
105°	0	6	18	33	39
107.5°	0	6	16	28	34
110°	0	6	15	24	29
112.5°	0	6	14	22	26
115°	1	6	13	20	23
117.5°	0	6	12	18	21
120°	1	6	11	17	19
122.5°	1	6	11	16	18
125°	1	5	11	15	17
127.5°	1	5	10	14	15
130°	1	5	9	13	14
132.5°	1	5	9	12	14
135°	1	5	9	12	13
137.5°	1	4	8	11	12
140°	1	4	8	10	11
142.5°	1	4	7	10	11
145°	2	4	7	9	10
147.5°	2	4	6	8	10
150°	2	4	6	7	9
152.5°	2	4	5	7	8
155°	2	4	5	6	7
157.5°	2	4	5	5	7
160°	2	3	4	5	6
162.5°	3	3	4	4	6
165°	3	3	4	4	5
167.5°	3	3	4	3	3
170°	3	3	3	3	2
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0



TEST NUMBER: P29460  
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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
180°	0	0	0	0	0

(END OF REPORT)