

Scaled data based on original data using
LM-35-02 Approved Method for Photometric Testing of Floodlights Using High Intensity
Discharge or Incandescent Filament Lamps

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: LUMIERE

Report Number: P12500

Luminaire Tested: **450-MH70T6-12-MB-BK**

Issue Date: 3/3/2020

Test Information

Test Method: LM-35-02
Report Number: P12500
Test Lab: PEACHTREE CITY
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 450-MH70T6-12-MB-BK
Description: LUMIERE MINI FLOOD CARMEL 450 T6 HID FIXTURE WITH CLEAR GLASS LENS, PATTERNED SPECULAR REFLECTOR.
Light Source: BIPIN G12 BASE CLEAR T6 CERAMIC METAL HALIDE LAMP. CMH70/T6/U 70 WATTS
Ballast/Driver: -

Summary

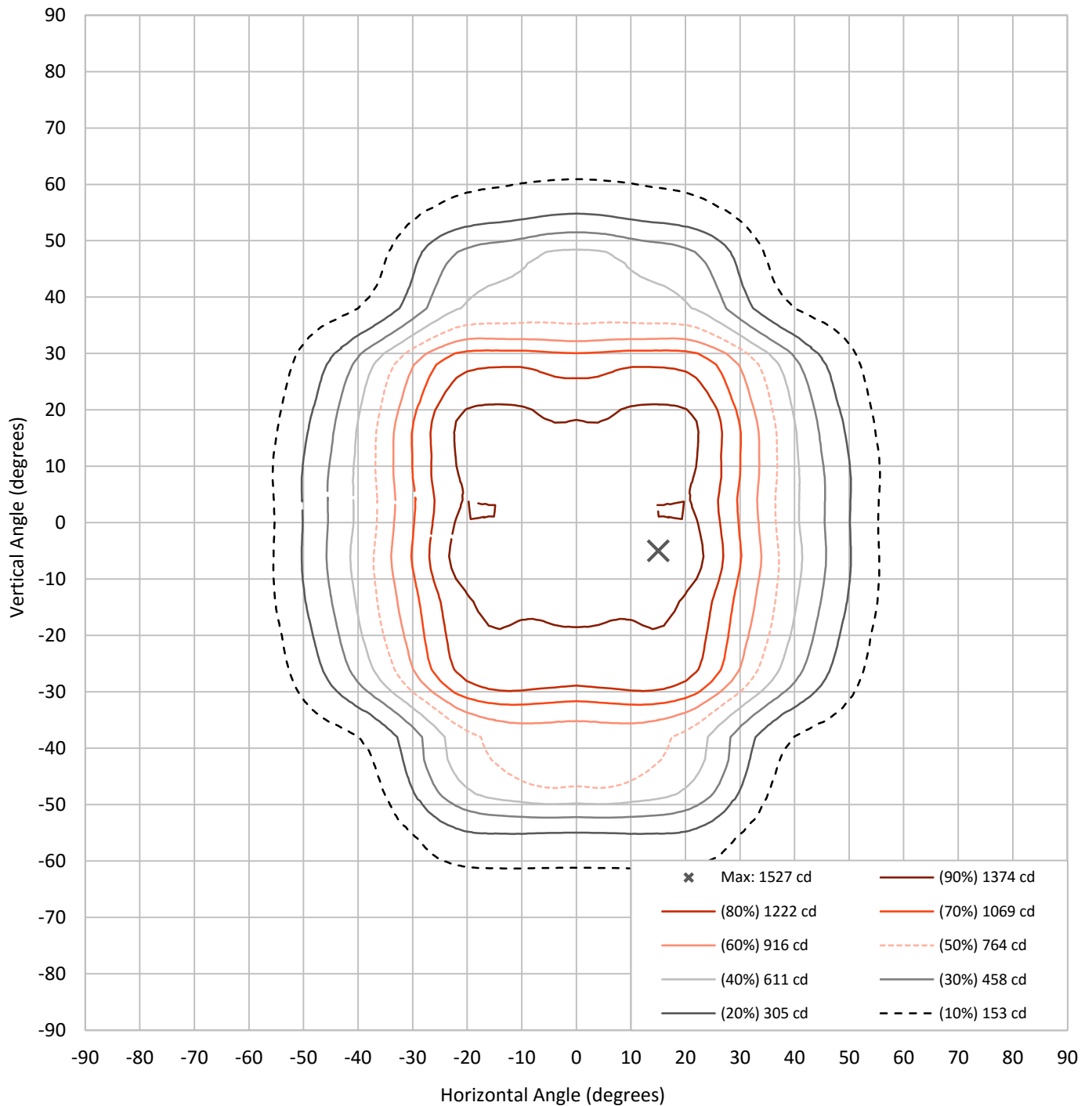
Lumens per Lamp:	6600 (1 lamp)	NEMA Type:	6H x 6V
Luminaire Lumens:	2515.5 lumens	Max Intensity:	1527 candela
Efficiency:	38.1%	Max Intensity Angle:	15°H x -5°V
Efficacy:	35.9 lumens/watt		
Luminous Opening:	Rectangular (W 0.25' x L: 0.15' x H: 0')		
Beam Angle (50%):	74°H x 78°V	Field Angle (10%):	110.2°H x 120.6°V
Beam Lumens:	1815.3 lumens	Field Lumens:	2423.9 lumens
Beam Efficiency:	72.2%	Field Efficiency:	96.4%
Input Watts (W):	70		
Input Voltage (V):	NR		
Input Current (Ain):	NR		
Voltage Rise (V):	1.8		
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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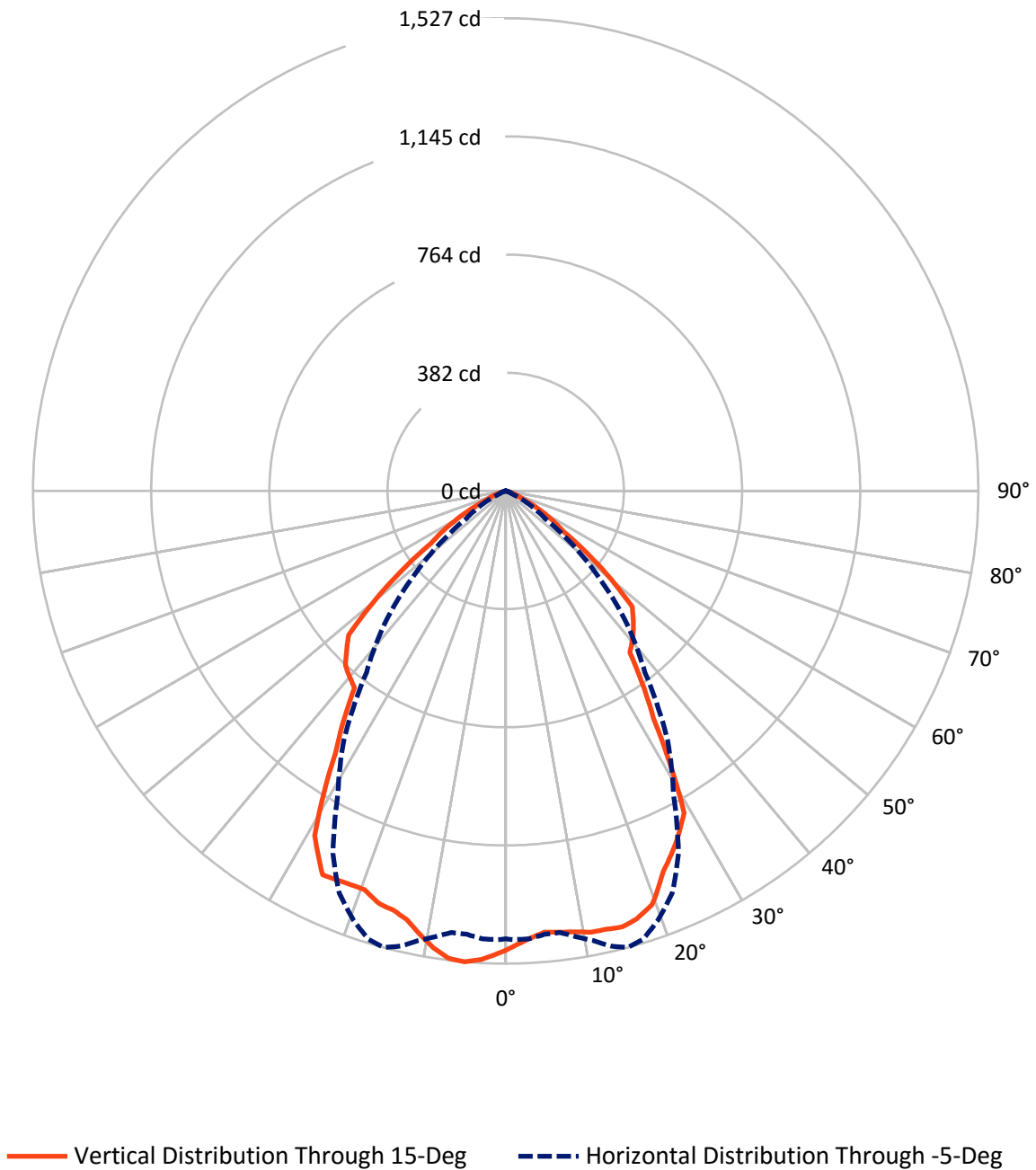
Iso-Candela Plot



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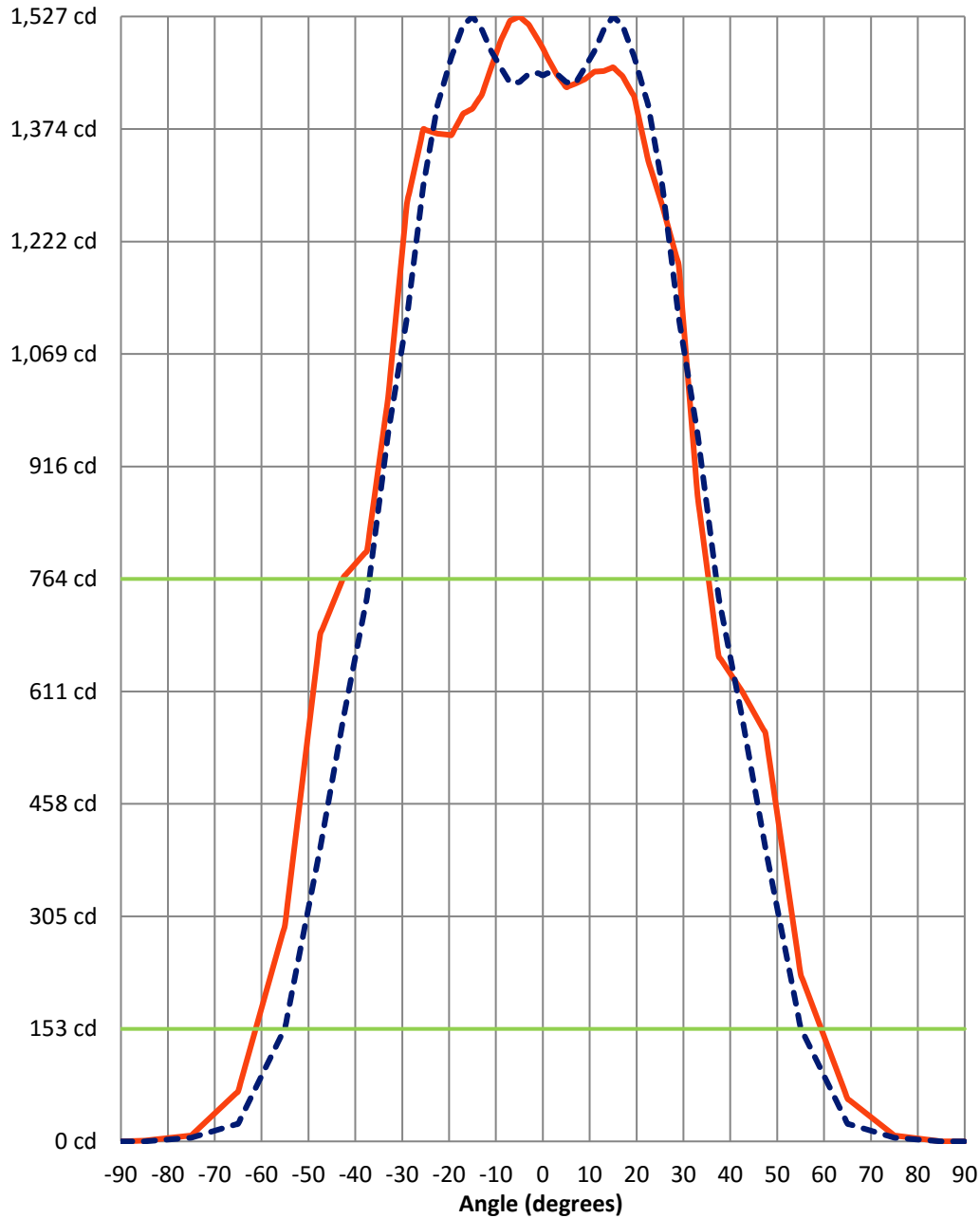
Luminous Intensity Polar Plot



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Luminous Intensity Plot



Beam:
 H Angle: 74°
 V Angle: 78°
 Lumens: 1815.3
 Efficiency: 72.2%

Field:
 H Angle: 110.2°
 V Angle: 120.6°
 Lumens: 2423.9
 Efficiency: 96.4%

Spill:
 Lumens: 91.6
 Efficiency: 3.6%

— Vertical Distribution through 15-Deg
 - - Horizontal Distribution through -5-Deg



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FIELD
BEAM

CANDELA DISTRIBUTION:

	0°	1°	3°	5°	7°	9°	11°	13°	15°	17°	19.5°
90°	0	0	0	0	0	0	0	0	0	0	0
85°	0	0	0	1	1	1	1	1	0	0	0
75°	6	6	7	8	8	8	8	8	8	7	7
65°	62	62	62	61	61	61	61	60	58	57	54
55°	285	284	280	274	266	256	247	232	227	221	210
47.5°	657	657	653	641	621	597	574	562	554	544	514
42.5°	664	664	664	661	651	639	627	617	611	601	585
37.5°	675	675	678	685	683	677	669	663	659	654	634
33°	853	853	857	864	869	870	871	872	877	884	886
29°	1148	1149	1152	1163	1175	1186	1191	1187	1189	1186	1177
25.5°	1226	1226	1225	1235	1253	1268	1273	1273	1270	1266	1258
22.5°	1278	1278	1274	1279	1300	1319	1326	1331	1331	1331	1324
19.5°	1362	1360	1353	1356	1375	1399	1413	1419	1418	1413	1400
17°	1388	1385	1381	1385	1402	1423	1438	1445	1446	1441	1427
15°	1404	1404	1402	1406	1415	1432	1446	1455	1458	1453	1433
13°	1417	1416	1412	1412	1417	1433	1446	1455	1453	1454	1437
11°	1414	1414	1409	1409	1410	1424	1439	1450	1452	1447	1430
9°	1417	1417	1411	1407	1403	1412	1421	1437	1442	1437	1415
7°	1422	1423	1416	1408	1397	1403	1414	1427	1436	1429	1404
5°	1415	1417	1409	1395	1386	1394	1406	1422	1431	1423	1398
3°	1416	1416	1406	1394	1390	1400	1416	1435	1448	1444	1412
1°	1416	1416	1404	1393	1393	1410	1424	1453	1471	810	1437
0°	1420	1421	1409	1401	1403	1417	1434	1464	1484	1478	1445
-1°	1427	1430	1419	1411	1413	1427	1445	1476	1495	1487	1452
-3°	1444	1446	1441	1429	1430	1446	1469	1497	1516	1505	1462
-5°	1447	1450	1449	1438	1437	1458	1480	1509	1527	1515	1472
-7°	1444	1448	1448	1439	1438	1452	1475	1507	1521	1510	1473
-9°	1434	1434	1434	1427	1426	1435	1452	1479	1494	1480	1444
-11°	1424	1425	1423	1417	1413	1419	1429	1448	1458	1445	1409
-13°	1424	1424	1423	1408	1399	1400	1403	1417	1421	1410	1377
-15°	1420	1418	1414	1398	1389	1388	1390	1398	1402	1390	1359
-17°	1407	1405	1403	1389	1383	1380	1384	1392	1395	1380	1348
-19.5°	1349	1348	1350	1344	1339	1340	1350	1363	1366	1355	1326
-22.5°	1337	1339	1343	1341	1337	1339	1351	1364	1368	1354	1318
-25.5°	1337	1340	1345	1348	1349	1359	1372	1377	1374	1350	1305
-29°	1232	1237	1244	1253	1258	1270	1278	1280	1273	1254	1211
-33°	984	985	992	1006	1011	1015	1021	1018	1010	994	960
-37.5°	844	844	841	843	842	844	840	824	802	775	735
-42.5°	869	868	869	866	854	839	818	791	766	745	722
-47.5°	752	755	764	767	757	739	719	705	688	664	618
-55°	283	283	284	284	287	292	297	295	294	298	291
-65°	72	72	73	72	72	70	70	70	68	66	65
-75°	7	7	7	8	8	8	8	8	8	8	8
-85°	0	0	1	2	2	2	1	1	1	1	1
-90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	22.5°	25.5°	29°	33°	37.5°	42.5°	47.5°	55°	65°	75°	85°
90°	0	0	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0	0	0
75°	7	6	6	5	4	3	1	0	0	0	0
65°	50	46	42	36	29	22	15	7	1	0	0
55°	192	169	137	89	63	46	32	17	4	0	0
47.5°	464	396	296	184	97	66	47	27	10	2	0
42.5°	545	459	345	221	125	79	57	32	11	1	0
37.5°	602	529	413	293	189	127	92	40	14	2	0
33°	845	768	659	506	368	251	172	57	18	3	0
29°	1144	1054	930	759	578	382	246	81	20	3	0
25.5°	1219	1131	998	831	643	444	280	101	22	3	0
22.5°	1281	1184	1038	864	673	475	303	117	23	3	0
19.5°	1353	1250	1091	903	697	504	332	131	25	4	0
17°	1376	1274	1118	934	718	523	349	139	23	3	0
15°	1378	1276	1124	942	727	531	360	143	22	3	0
13°	1370	1266	1118	941	726	536	372	153	22	4	0
11°	1366	1266	1115	941	728	545	381	157	22	4	0
9°	1362	1272	1116	945	731	555	391	159	22	4	0
7°	1348	1267	1105	936	721	560	396	159	23	4	0
5°	1333	1246	1087	928	713	561	395	154	23	3	0
3°	1338	1241	1087	926	713	560	393	152	23	4	0
1°	1361	1254	1093	935	714	559	392	151	24	4	0
0°	1371	1261	1096	940	714	559	391	150	23	4	0
-1°	1381	1269	1100	943	717	562	392	150	23	4	0
-3°	1394	1282	1106	950	726	570	395	152	24	5	0
-5°	1406	1297	1118	961	739	576	398	154	24	5	0
-7°	1407	1294	1117	963	746	573	397	155	23	3	0
-9°	1381	1270	1099	946	741	567	393	156	24	5	0
-11°	1348	1240	1080	931	731	556	382	153	24	5	0
-13°	1314	1210	1063	916	724	544	372	150	23	5	0
-15°	1296	1195	1052	907	713	530	363	147	25	5	0
-17°	1285	1184	1038	889	700	515	345	138	24	4	0
-19.5°	1268	1171	1026	864	682	495	330	127	25	4	0
-22.5°	1255	1153	1000	825	645	469	308	116	25	4	0
-25.5°	1238	1133	974	788	613	437	281	102	24	4	0
-29°	1139	1016	865	692	523	365	237	81	22	3	0
-33°	887	771	633	483	342	242	167	58	20	4	0
-37.5°	670	563	432	302	186	124	90	45	18	3	0
-42.5°	644	548	415	254	138	87	61	38	14	1	0
-47.5°	553	464	340	200	110	75	52	32	12	1	0
-55°	271	227	163	114	77	54	40	22	7	0	0
-65°	61	57	51	44	36	28	20	10	2	0	0
-75°	8	7	6	6	5	3	2	1	0	0	0
-85°	0	0	0	0	0	0	0	0	0	0	0
-90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	90°
90°	0
85°	0
75°	0
65°	0
55°	0
47.5°	0
42.5°	0
37.5°	0
33°	0
29°	0
25.5°	0
22.5°	0
19.5°	0
17°	0
15°	0
13°	0
11°	0
9°	0
7°	0
5°	0
3°	0
1°	0
0°	0
-1°	0
-3°	0
-5°	0
-7°	0
-9°	0
-11°	0
-13°	0
-15°	0
-17°	0
-19.5°	0
-22.5°	0
-25.5°	0
-29°	0
-33°	0
-37.5°	0
-42.5°	0
-47.5°	0
-55°	0
-65°	0
-75°	0
-85°	0
-90°	0

(END OF REPORT)