

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: McGRAW-EDISON

Report Number: P197618

Luminaire Tested: **TT-C4-LED-E1-MQ-MS/DIM**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P197618
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P115333)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TT-C4-LED-E1-MQ-MS/DIM
Description: TOPTIER LED PARKING GARAGE LUMINAIRE
MEDIUM DISTRIBUTION WITH DIMMING OCCUPANCY SENSOR
Light Source: (160) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7247.3 lumens
Efficiency: N/A
Efficacy: 125.0 lumens/watt
Luminous Opening: Circular (Dia: 1.12' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G2

Input Watts (W): 58
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
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



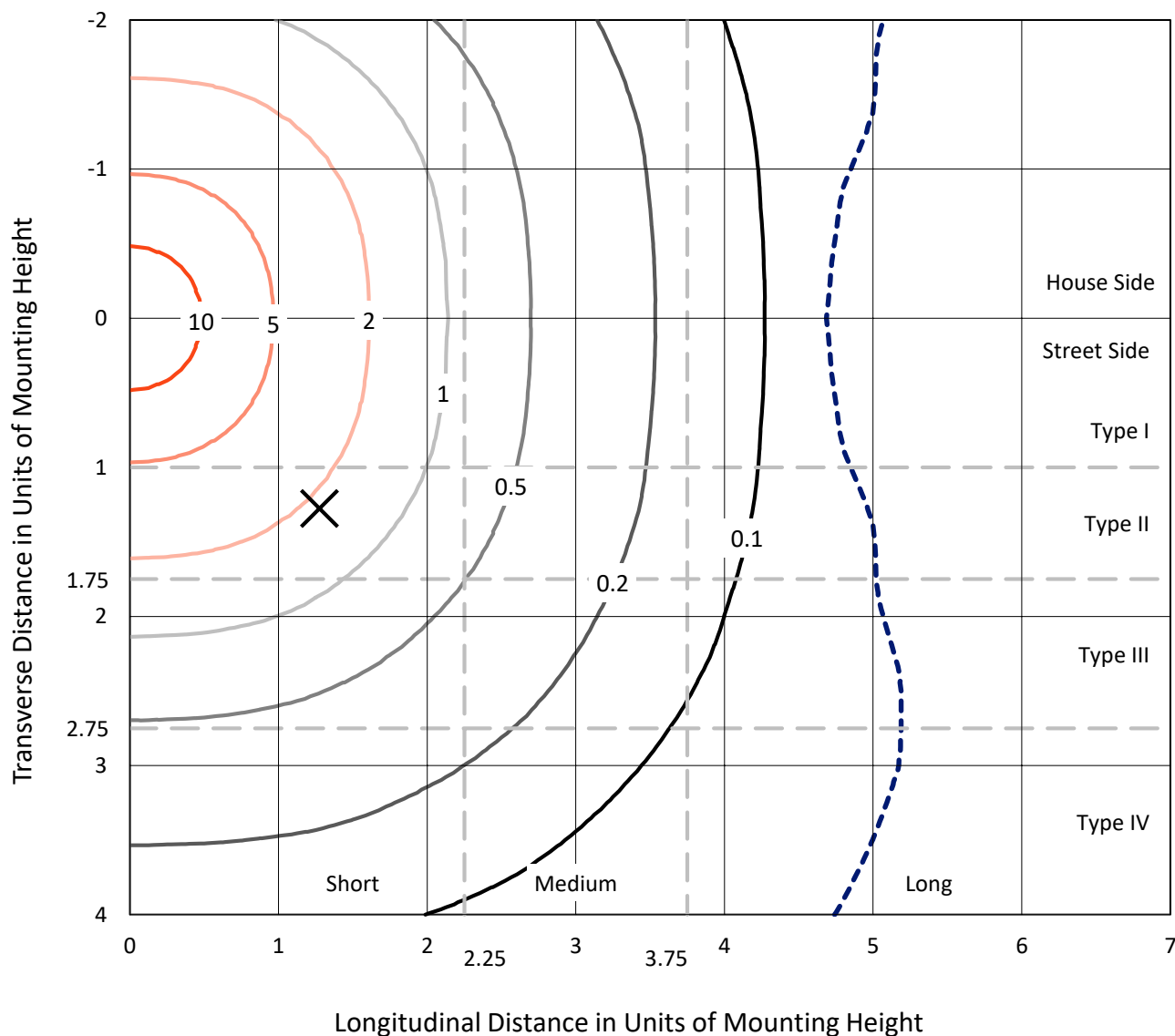
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

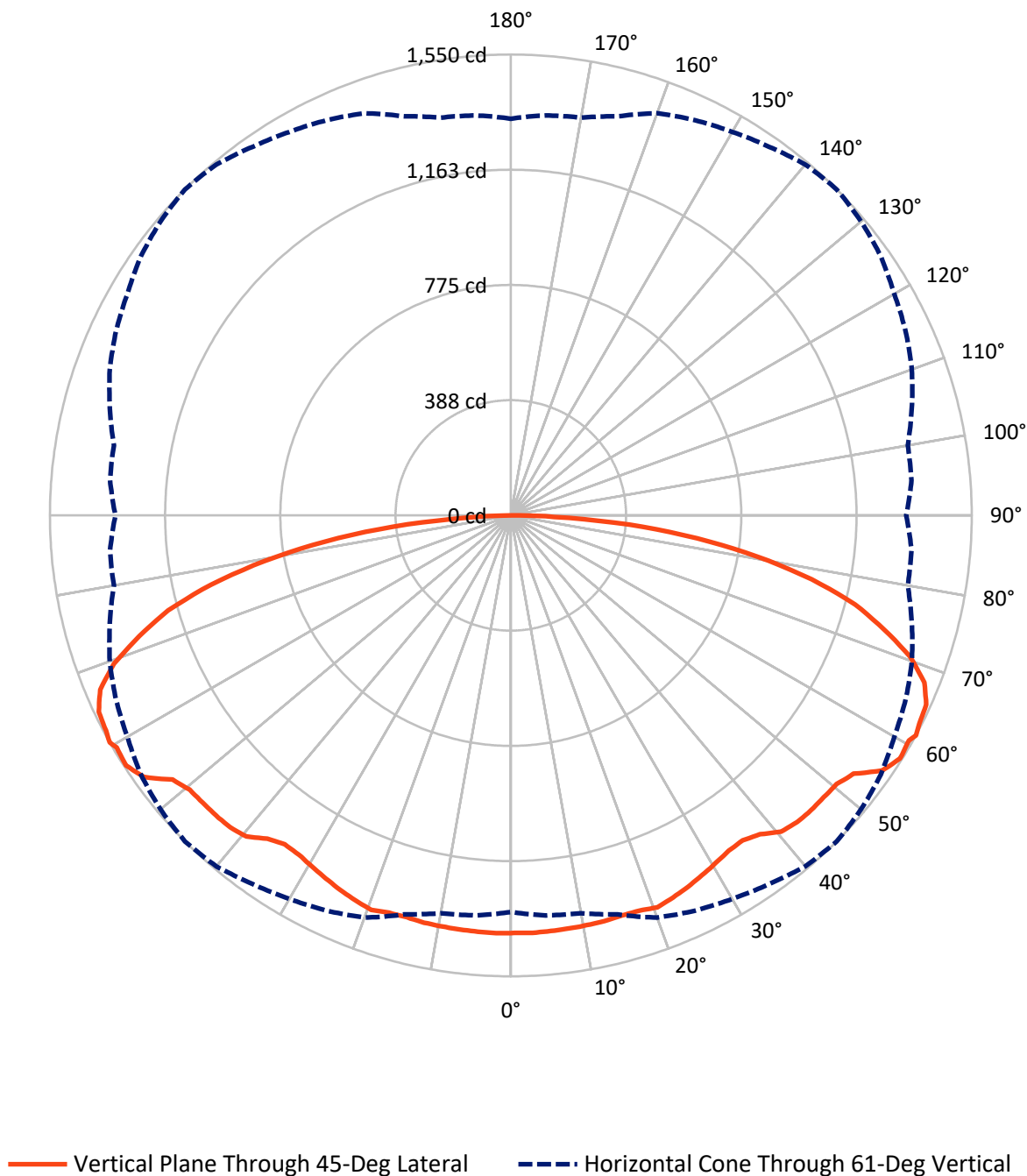


Based on 10 foot mounting height. Maximum calculated value = 14 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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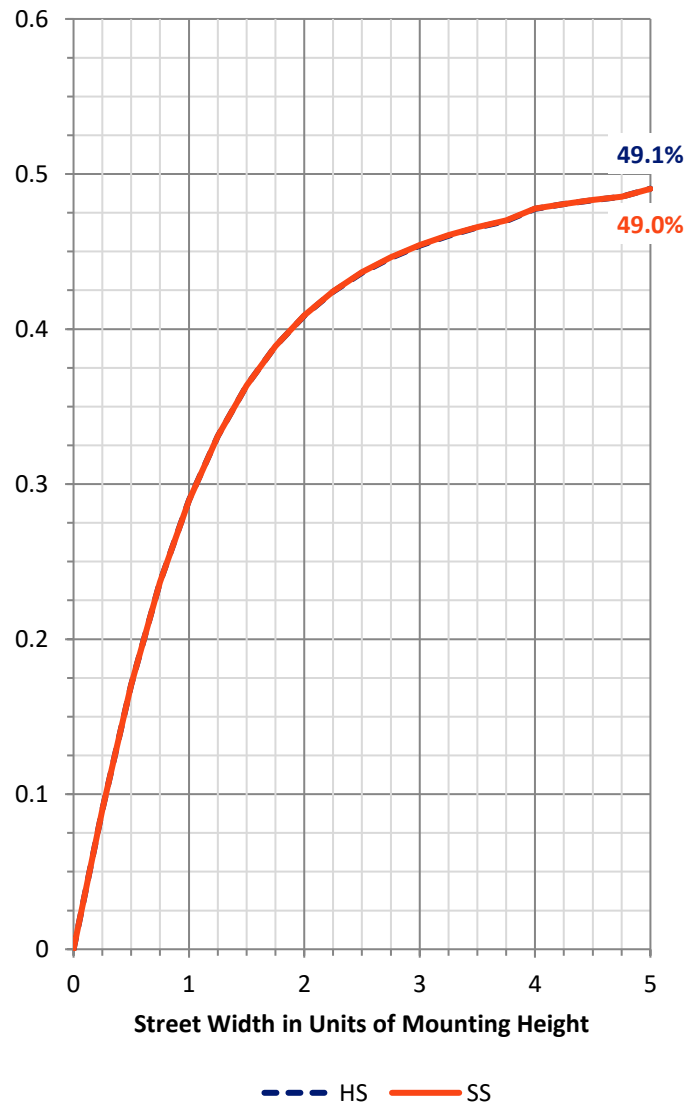
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3623.7	0.0	3623.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3623.7	0.0	3623.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	7247.3	0.0	7247.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.9	1.8
10°-20°	396.0	5.5
20°-30°	637.2	8.8
30°-40°	844.1	11.6
40°-50°	1066.0	14.7
50°-60°	1277.3	17.6
60°-70°	1396.6	19.3
70°-80°	1118.0	15.4
80°-90°	378.2	5.2
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°-90°	7247.3	100.0
0°-180°	7247.3	100.0

Coefficient of Utilization



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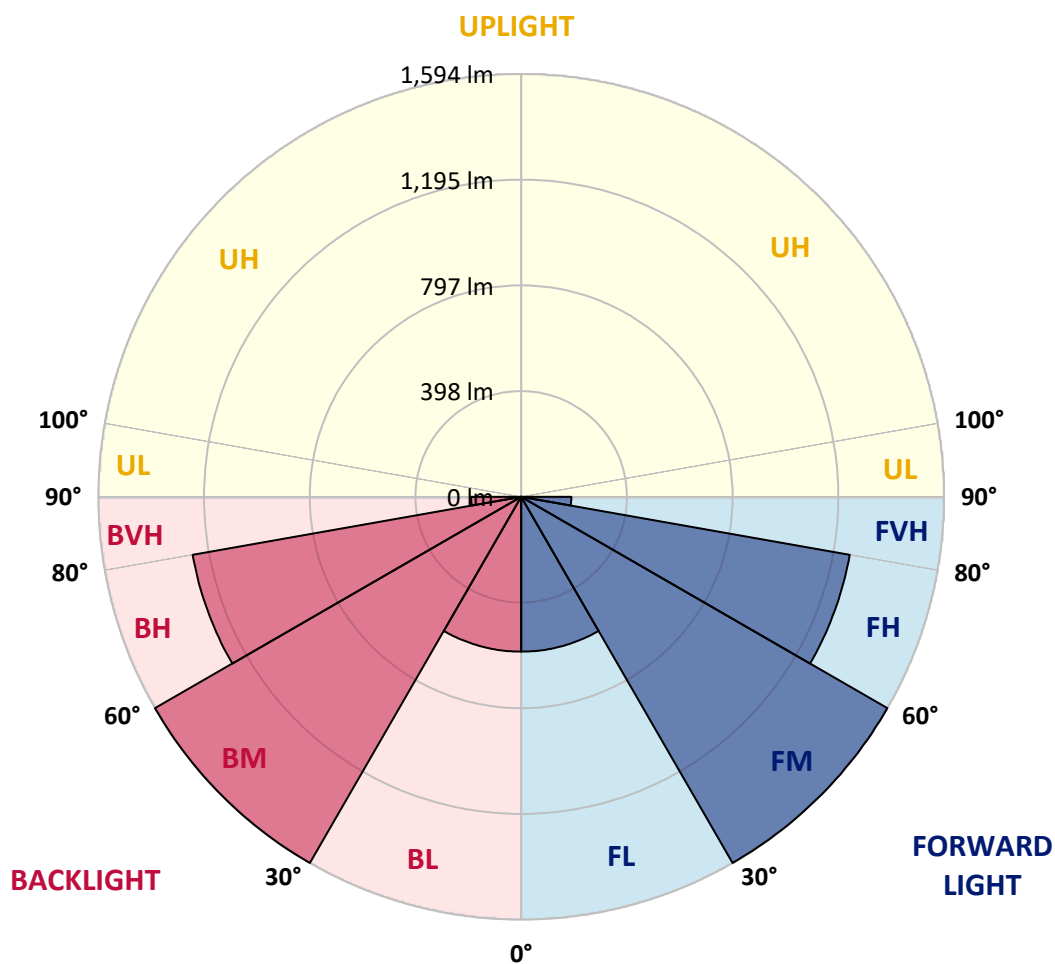
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	583.6	8.1			
FM	(30°-60°)	1593.7	22.0			
FH	(60°-80°)	1257.3	17.3			G1/1800
FVH	(80°-90°)	189.1	2.6			G2/225
BL	(0°-30°)	583.6	8.1	B2/1000		
BM	(30°-60°)	1593.7	22.0	B2/2500		
BH	(60°-80°)	1257.3	17.3	B3/2500		G1/1800
BVH	(80°-90°)	189.1	2.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1
2.5°	1405.5	1404.1	1405.5	1405.5	1405.5	1405.5	1405.5	1405.5	1405.5	1405.5	1405.5
5°	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1
7.5°	1402.8	1402.8	1402.8	1402.8	1402.8	1402.8	1402.8	1402.8	1404.1	1402.8	1404.1
10°	1400.1	1400.1	1400.1	1400.1	1401.4	1401.4	1401.4	1401.4	1401.4	1401.4	1401.4
12.5°	1397.4	1397.4	1397.4	1397.4	1398.8	1398.8	1398.8	1398.8	1400.1	1400.1	1398.8
15°	1394.6	1393.4	1393.4	1394.6	1394.6	1396.0	1396.0	1396.0	1397.4	1396.0	1396.0
17.5°	1392.0	1390.6	1392.0	1393.4	1393.4	1394.6	1396.0	1396.0	1397.4	1397.4	1397.4
20°	1396.0	1394.6	1396.0	1397.4	1398.8	1401.4	1402.8	1404.1	1405.5	1406.8	1406.8
22.5°	1388.0	1386.6	1388.0	1388.0	1389.2	1390.6	1393.4	1394.6	1396.0	1396.0	1396.0
25°	1375.8	1375.8	1377.1	1377.1	1378.5	1379.8	1381.2	1382.5	1382.5	1383.8	1382.5
27.5°	1362.3	1362.3	1363.7	1363.7	1366.3	1366.3	1367.7	1369.1	1370.3	1370.3	1370.3
30°	1346.0	1346.0	1347.4	1348.8	1351.5	1352.8	1354.2	1355.5	1356.9	1356.9	1356.9
32.5°	1331.2	1329.8	1331.2	1333.9	1338.0	1340.6	1343.4	1344.8	1344.8	1344.8	1346.0
35°	1319.1	1320.5	1323.1	1325.8	1331.2	1333.9	1336.6	1340.6	1342.0	1342.0	1342.0
37.5°	1321.7	1323.1	1327.2	1332.6	1339.4	1347.4	1352.8	1358.2	1362.3	1360.9	1359.5
40°	1339.4	1342.0	1348.8	1356.9	1367.7	1378.5	1386.6	1393.4	1397.4	1398.8	1397.4
42.5°	1342.0	1344.8	1350.1	1362.3	1374.5	1386.6	1397.4	1404.1	1409.5	1410.9	1409.5
45°	1340.6	1340.6	1348.8	1362.3	1374.5	1386.6	1400.1	1409.5	1414.9	1414.9	1414.9
47.5°	1331.2	1335.2	1340.6	1354.2	1370.3	1382.5	1396.0	1405.5	1412.2	1416.3	1412.2
50°	1331.2	1331.2	1340.6	1350.1	1364.9	1386.6	1405.5	1414.9	1421.7	1420.3	1421.7
52.5°	1328.5	1336.6	1342.0	1355.5	1382.5	1404.1	1418.9	1432.5	1442.0	1443.2	1440.6
55°	1352.8	1354.2	1366.3	1392.0	1417.7	1442.0	1468.9	1489.2	1505.4	1514.9	1501.4
57.5°	1371.7	1364.9	1389.2	1410.9	1440.6	1477.1	1517.5	1533.7	1545.8	1543.2	1547.2
60°	1346.0	1355.5	1373.1	1396.0	1443.2	1479.7	1501.4	1518.9	1533.7	1537.8	1532.4
61°	1333.9	1350.1	1358.2	1389.2	1439.2	1466.3	1489.2	1513.5	1540.4	1550.0	1537.8
62.5°	1313.7	1339.4	1336.6	1386.6	1417.7	1448.6	1491.8	1520.3	1539.2	1541.8	1539.2
65°	1315.1	1310.9	1342.0	1378.5	1409.5	1464.9	1501.4	1518.9	1529.7	1535.1	1532.4
67.5°	1271.8	1258.3	1296.2	1321.7	1374.5	1417.7	1452.8	1478.4	1494.6	1500.0	1493.2
70°	1171.9	1181.4	1208.3	1247.5	1290.8	1343.4	1375.8	1409.5	1423.1	1424.3	1424.3
72.5°	1076.0	1081.4	1108.5	1144.9	1194.8	1240.8	1273.1	1300.2	1312.3	1313.7	1316.3
75°	949.1	954.5	985.6	1019.3	1069.3	1108.5	1131.4	1163.9	1181.4	1196.2	1184.0
77.5°	801.9	811.4	835.7	872.2	918.1	939.7	980.2	1018.0	1030.2	1034.2	1030.2
80°	635.9	648.1	669.6	718.2	738.5	773.6	812.8	829.0	839.8	842.5	843.8
82.5°	457.6	467.2	490.1	523.8	546.9	575.2	602.1	622.4	634.5	631.9	630.5
85°	270.0	272.7	297.0	320.0	337.5	355.0	376.7	391.5	394.3	399.6	398.3
87.5°	81.1	82.3	93.2	105.4	113.4	121.5	135.1	152.6	156.6	145.8	147.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1
2.5°	1405.5	1405.5	1405.5	1405.5	1405.5	1405.5	1404.1	1405.5
5°	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1
7.5°	1404.1	1402.8	1402.8	1402.8	1402.8	1402.8	1402.8	1402.8
10°	1401.4	1401.4	1401.4	1401.4	1400.1	1400.1	1400.1	1400.1
12.5°	1398.8	1398.8	1398.8	1398.8	1397.4	1397.4	1397.4	1397.4
15°	1396.0	1396.0	1396.0	1396.0	1394.6	1394.6	1394.6	1394.6
17.5°	1397.4	1396.0	1394.6	1394.6	1393.4	1392.0	1392.0	1392.0
20°	1405.5	1404.1	1401.4	1398.8	1397.4	1396.0	1396.0	1396.0
22.5°	1394.6	1393.4	1390.6	1389.2	1389.2	1388.0	1386.6	1386.6
25°	1382.5	1379.8	1379.8	1378.5	1378.5	1375.8	1375.8	1374.5
27.5°	1369.1	1367.7	1366.3	1364.9	1364.9	1363.7	1362.3	1360.9
30°	1356.9	1354.2	1351.5	1350.1	1348.8	1347.4	1347.4	1347.4
32.5°	1344.8	1342.0	1340.6	1336.6	1333.9	1332.6	1331.2	1331.2
35°	1340.6	1336.6	1333.9	1329.8	1325.8	1323.1	1321.7	1319.1
37.5°	1356.9	1351.5	1347.4	1340.6	1331.2	1327.2	1323.1	1321.7
40°	1392.0	1386.6	1378.5	1367.7	1356.9	1348.8	1342.0	1339.4
42.5°	1404.1	1397.4	1386.6	1375.8	1362.3	1350.1	1344.8	1342.0
45°	1408.1	1401.4	1386.6	1373.1	1360.9	1350.1	1342.0	1339.4
47.5°	1404.1	1394.6	1381.2	1370.3	1352.8	1339.4	1333.9	1329.8
50°	1413.5	1405.5	1388.0	1363.7	1348.8	1340.6	1331.2	1329.8
52.5°	1432.5	1417.7	1401.4	1383.8	1355.5	1339.4	1333.9	1327.2
55°	1489.2	1468.9	1440.6	1412.2	1394.6	1369.1	1352.8	1352.8
57.5°	1532.4	1516.1	1479.7	1442.0	1409.5	1390.6	1366.3	1367.7
60°	1520.3	1498.6	1481.1	1443.2	1397.4	1371.7	1362.3	1344.8
61°	1518.9	1489.2	1464.9	1435.2	1396.0	1355.5	1352.8	1329.8
62.5°	1521.5	1494.6	1448.6	1417.7	1388.0	1335.2	1333.9	1312.3
65°	1518.9	1493.2	1470.3	1412.2	1371.7	1350.1	1304.2	1321.7
67.5°	1477.1	1454.1	1412.2	1379.8	1317.7	1290.8	1265.1	1265.1
70°	1410.9	1377.1	1336.6	1296.2	1254.3	1208.3	1185.4	1171.9
72.5°	1300.2	1271.8	1239.4	1196.2	1144.9	1103.1	1081.4	1072.0
75°	1161.1	1130.0	1101.7	1069.3	1015.3	980.2	957.3	950.5
77.5°	1015.3	988.3	938.4	907.3	870.8	830.4	810.1	801.9
80°	829.0	814.1	779.0	729.0	711.5	661.6	648.1	635.9
82.5°	622.4	606.2	573.8	538.7	517.2	488.7	464.4	461.8
85°	391.5	380.7	360.4	334.9	307.8	291.7	270.0	275.4
87.5°	145.8	139.1	126.9	110.8	98.6	87.7	76.9	81.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)