

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: P197594

Luminaire Tested: **TT-C4-LED-E1-MQ-LWR-LW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P197594  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P115393)  
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-LWR-LW  
Description: TOPTIER LED PARKING GARAGE LUMINAIRE  
MEDIUM DISTRIBUTION WITH LumaWatt WIRELESS SENSOR  
Light Source: (160) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6594.3 lumens  
Efficiency: N/A  
Efficacy: 113.7 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G2

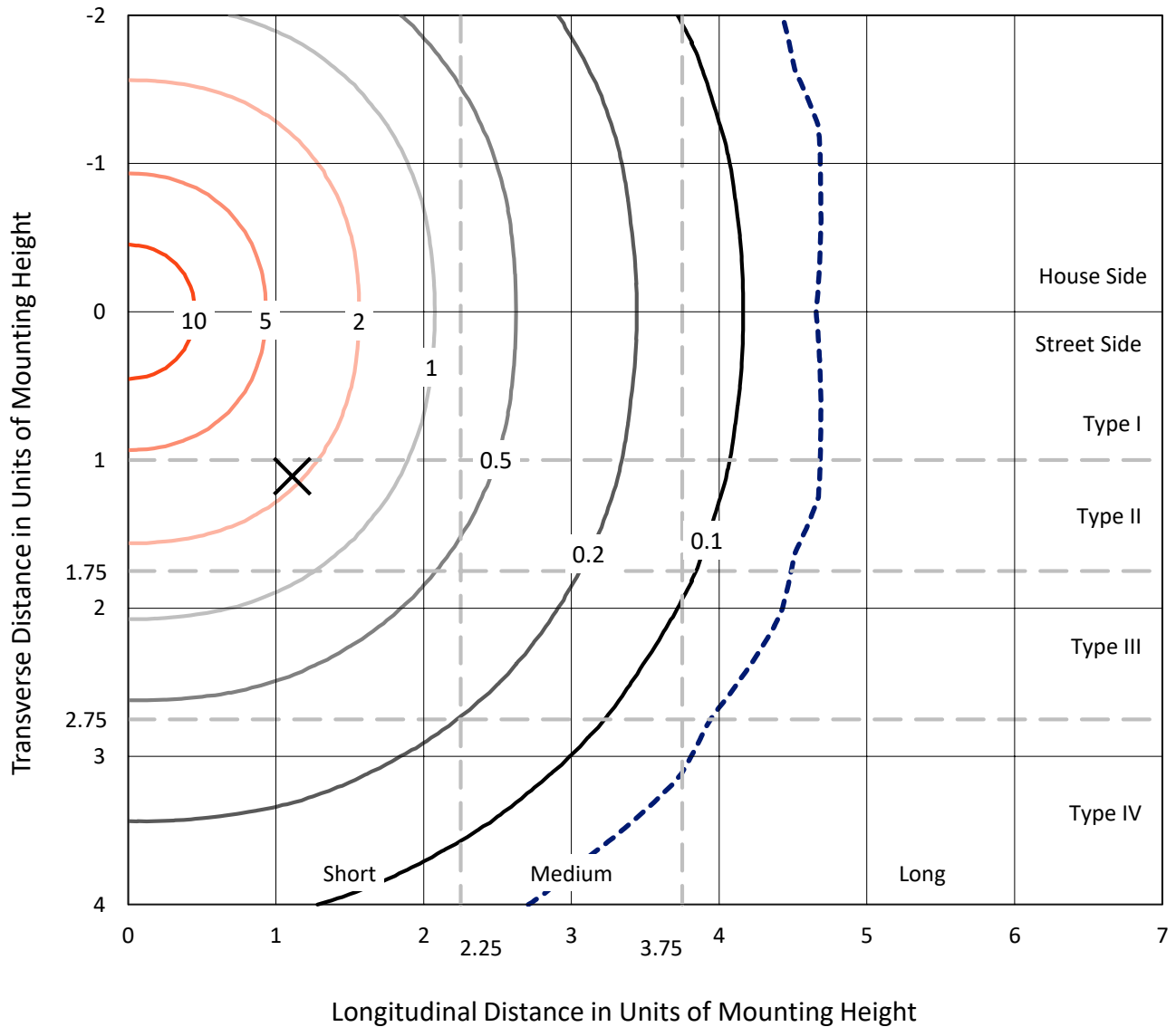
Input Watts (W): 58  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

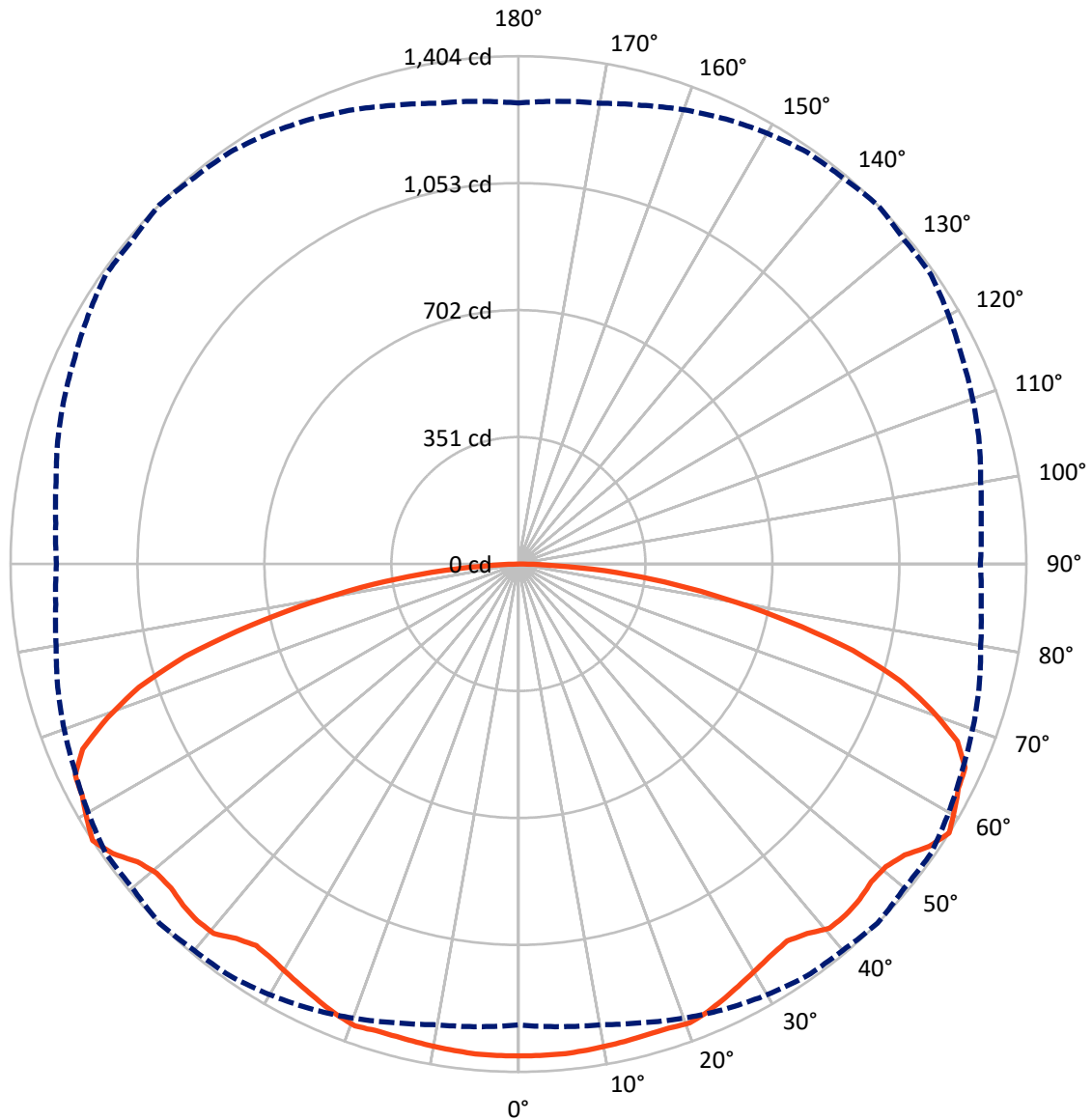
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.6 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

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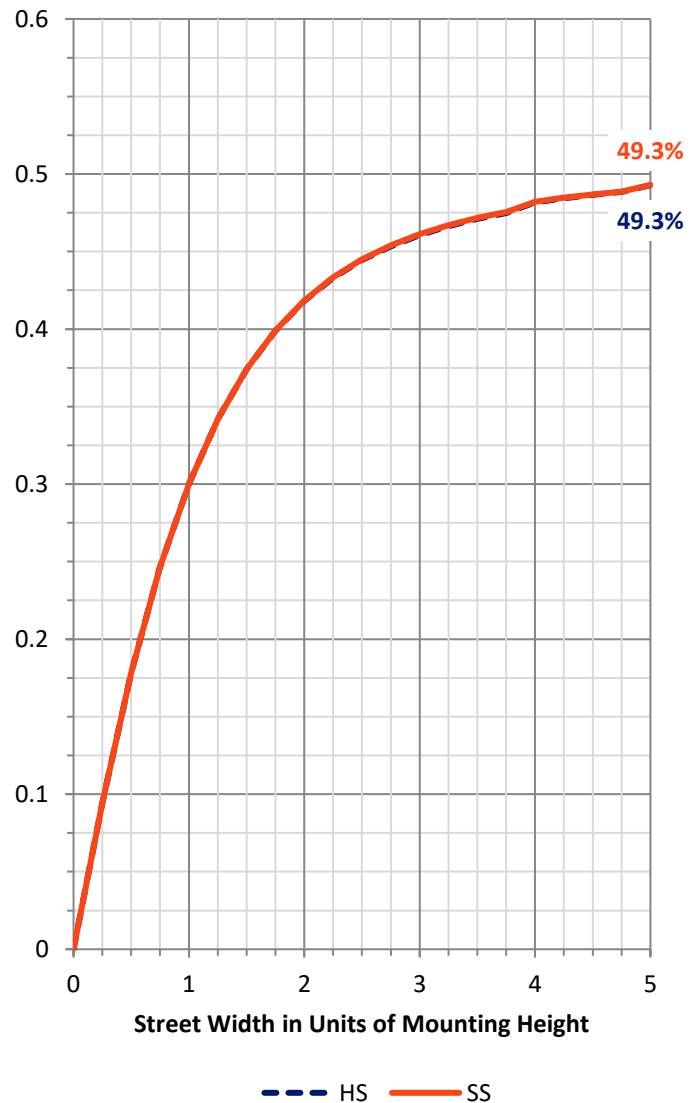
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3297.1	0.0	3297.1
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	3297.1	0.0	3297.1
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	6594.3	0.0	6594.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.6	2.0
10°-20°	382.3	5.8
20°-30°	612.4	9.3
30°-40°	806.1	12.2
40°-50°	1004.0	15.2
50°-60°	1182.7	17.9
60°-70°	1257.4	19.1
70°-80°	942.9	14.3
80°-90°	276.9	4.2
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°	6594.3	100.0
0°-180°	6594.3	100.0



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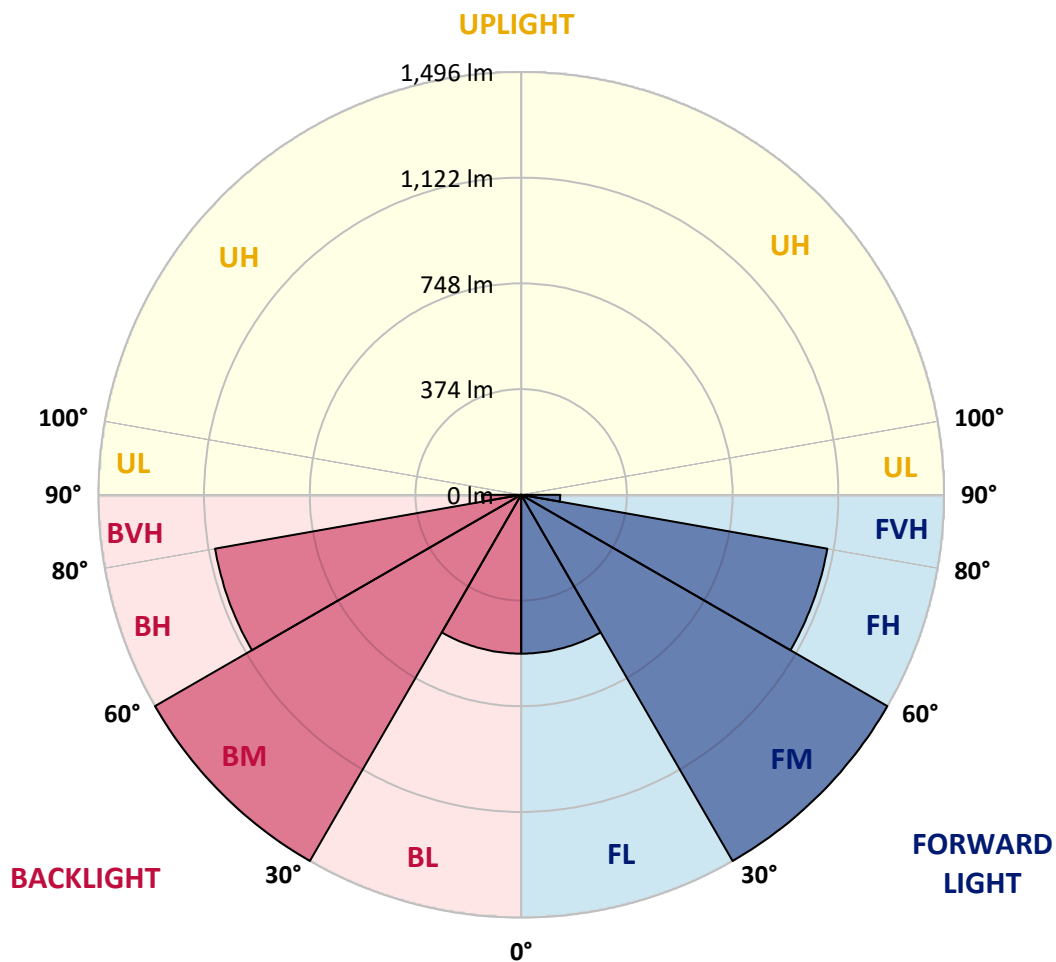
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	562.1	8.5			
FM (30°-60°)	1496.4	22.7			
FH (60°-80°)	1100.1	16.7			G1/1800
FVH (80°-90°)	138.4	2.1			G2/225
BL (0°-30°)	562.1	8.5	B2/1000		
BM (30°-60°)	1496.4	22.7	B2/2500		
BH (60°-80°)	1100.1	16.7	B3/2500		G1/1800
BVH (80°-90°)	138.4	2.1			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°	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2
2.5°	1358.9	1358.9	1358.9	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2
5°	1358.9	1358.9	1358.9	1358.9	1358.9	1358.9	1360.2	1360.2	1360.2	1360.2	1360.2
7.5°	1356.1	1356.1	1356.1	1356.1	1356.1	1357.5	1357.5	1357.5	1357.5	1357.5	1357.5
10°	1353.3	1353.3	1353.3	1353.3	1354.7	1354.7	1354.7	1354.7	1354.7	1354.7	1354.7
12.5°	1350.6	1350.6	1349.2	1350.6	1350.6	1350.6	1351.9	1351.9	1351.9	1351.9	1351.9
15°	1345.0	1345.0	1346.4	1346.4	1347.8	1347.8	1347.8	1347.8	1349.2	1349.2	1349.2
17.5°	1342.3	1342.3	1343.7	1345.0	1345.0	1346.4	1347.8	1347.8	1349.2	1349.2	1349.2
20°	1346.4	1346.4	1346.4	1347.8	1349.2	1350.6	1351.9	1353.3	1353.3	1354.7	1353.3
22.5°	1338.1	1338.1	1338.1	1339.5	1339.5	1339.5	1340.9	1342.3	1342.3	1343.7	1342.3
25°	1322.9	1322.9	1324.3	1324.3	1325.7	1325.7	1327.1	1327.1	1327.1	1328.5	1328.5
27.5°	1307.8	1306.4	1309.1	1309.1	1310.5	1310.5	1311.9	1313.3	1313.3	1313.3	1314.7
30°	1291.2	1291.2	1292.6	1292.6	1293.9	1295.3	1296.7	1298.1	1298.1	1299.5	1299.5
32.5°	1273.2	1274.6	1276.0	1277.4	1278.8	1281.5	1282.9	1284.3	1285.7	1287.0	1285.7
35°	1260.8	1262.2	1263.6	1266.3	1270.5	1273.2	1276.0	1278.8	1280.1	1280.1	1280.1
37.5°	1263.6	1264.9	1267.7	1273.2	1280.1	1284.3	1289.8	1293.9	1295.3	1296.7	1296.7
40°	1278.8	1281.5	1285.7	1292.6	1300.9	1307.8	1316.0	1320.2	1322.9	1324.3	1322.9
42.5°	1277.4	1281.5	1285.7	1293.9	1303.6	1310.5	1318.8	1322.9	1325.7	1327.1	1325.7
45°	1273.2	1276.0	1280.1	1288.4	1295.3	1305.0	1313.3	1317.4	1321.6	1322.9	1321.6
47.5°	1263.6	1263.6	1264.9	1273.2	1282.9	1295.3	1302.2	1309.1	1313.3	1313.3	1313.3
50°	1251.1	1256.7	1259.4	1270.5	1280.1	1291.2	1303.6	1313.3	1314.7	1316.0	1314.7
52.5°	1251.1	1252.5	1262.2	1269.1	1288.4	1305.0	1317.4	1327.1	1335.4	1336.8	1336.8
55°	1273.2	1276.0	1281.5	1298.1	1313.3	1338.1	1358.9	1367.1	1372.7	1378.2	1372.7
57.5°	1274.6	1284.3	1293.9	1313.3	1336.8	1357.5	1375.4	1390.6	1394.8	1404.4	1393.4
60°	1258.0	1260.8	1270.5	1293.9	1324.3	1346.4	1363.0	1376.8	1390.6	1385.1	1390.6
62.5°	1231.8	1238.7	1252.5	1270.5	1295.3	1321.6	1346.4	1350.6	1371.3	1365.8	1374.0
65°	1211.1	1216.6	1230.4	1256.7	1287.0	1303.6	1331.2	1347.8	1346.4	1357.5	1345.0
67.5°	1160.0	1164.1	1176.6	1202.8	1231.8	1256.7	1264.9	1291.2	1293.9	1309.1	1295.3
70°	1075.8	1085.4	1103.4	1128.2	1151.7	1172.4	1187.6	1201.4	1209.7	1212.5	1209.7
72.5°	970.8	986.0	999.8	1023.3	1046.8	1060.6	1070.2	1089.6	1095.1	1103.4	1100.6
75°	863.1	863.1	876.9	894.9	912.8	921.1	926.6	939.0	945.9	955.6	947.3
77.5°	715.3	723.6	736.0	751.2	748.5	752.6	752.6	759.5	756.8	763.7	769.2
80°	560.7	569.0	580.0	591.0	589.7	580.0	586.9	578.6	575.9	577.2	581.4
82.5°	400.5	406.0	415.7	422.6	422.6	415.7	418.4	410.1	412.9	406.0	411.5
85°	229.2	236.1	243.0	250.0	250.0	245.8	250.0	238.9	240.3	240.3	240.3
87.5°	56.6	62.1	64.9	69.0	66.3	73.2	77.3	70.4	71.8	69.0	73.2
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°	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2
2.5°	1360.2	1358.9	1360.2	1360.2	1360.2	1360.2	1358.9	1358.9
5°	1360.2	1360.2	1360.2	1358.9	1358.9	1358.9	1358.9	1358.9
7.5°	1357.5	1357.5	1357.5	1356.1	1356.1	1356.1	1356.1	1356.1
10°	1354.7	1354.7	1353.3	1353.3	1353.3	1353.3	1353.3	1353.3
12.5°	1351.9	1351.9	1350.6	1350.6	1350.6	1350.6	1350.6	1349.2
15°	1349.2	1349.2	1347.8	1347.8	1346.4	1346.4	1345.0	1345.0
17.5°	1349.2	1347.8	1346.4	1345.0	1345.0	1343.7	1342.3	1342.3
20°	1353.3	1351.9	1350.6	1349.2	1347.8	1346.4	1346.4	1345.0
22.5°	1342.3	1340.9	1339.5	1339.5	1338.1	1338.1	1338.1	1336.8
25°	1328.5	1327.1	1327.1	1324.3	1324.3	1322.9	1322.9	1321.6
27.5°	1313.3	1311.9	1311.9	1310.5	1309.1	1307.8	1306.4	1306.4
30°	1298.1	1296.7	1296.7	1295.3	1292.6	1292.6	1291.2	1289.8
32.5°	1284.3	1284.3	1282.9	1280.1	1277.4	1276.0	1273.2	1273.2
35°	1280.1	1277.4	1274.6	1270.5	1266.3	1263.6	1262.2	1260.8
37.5°	1295.3	1291.2	1284.3	1280.1	1274.6	1269.1	1266.3	1263.6
40°	1321.6	1314.7	1307.8	1300.9	1292.6	1285.7	1280.1	1278.8
42.5°	1322.9	1318.8	1311.9	1303.6	1293.9	1285.7	1280.1	1278.8
45°	1318.8	1313.3	1305.0	1295.3	1288.4	1278.8	1274.6	1273.2
47.5°	1309.1	1303.6	1295.3	1281.5	1271.9	1264.9	1263.6	1263.6
50°	1314.7	1303.6	1289.8	1281.5	1271.9	1260.8	1256.7	1253.9
52.5°	1327.1	1316.0	1307.8	1289.8	1269.1	1259.4	1253.9	1249.8
55°	1367.1	1361.6	1336.8	1311.9	1296.7	1284.3	1278.8	1276.0
57.5°	1393.4	1374.0	1353.3	1336.8	1318.8	1298.1	1284.3	1277.4
60°	1379.6	1358.9	1349.2	1327.1	1289.8	1267.7	1259.4	1255.3
62.5°	1349.2	1349.2	1322.9	1288.4	1274.6	1255.3	1240.1	1234.6
65°	1347.8	1329.9	1303.6	1291.2	1258.0	1229.0	1213.9	1211.1
67.5°	1289.8	1264.9	1258.0	1230.4	1202.8	1176.6	1165.5	1160.0
70°	1201.4	1193.1	1172.4	1154.5	1129.6	1102.0	1086.8	1081.3
72.5°	1089.6	1075.8	1066.1	1050.9	1027.4	992.9	980.5	973.6
75°	937.7	930.8	930.8	914.2	892.1	871.4	870.0	867.2
77.5°	754.0	756.8	763.7	745.7	752.6	741.6	731.9	725.0
80°	573.1	585.5	586.9	591.0	595.2	580.0	573.1	564.8
82.5°	407.4	414.3	422.6	424.0	426.7	415.7	410.1	401.9
85°	240.3	244.4	251.3	251.3	251.3	241.7	238.9	232.0
87.5°	70.4	70.4	74.6	70.4	70.4	70.4	63.5	67.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)