

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: LUMARK

Report Number: P272719

Luminaire Tested: **CTKR2-B1-D-UNV-T3**

Issue Date: 9/28/2018

Test Information

Test Method: LM-79-08
Report Number: P272719
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-939-11)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 9/28/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: CTKR2-B1-D-UNV-T3
Description: CARETAKER AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K LED WITH TYPE III OPTIC AND U0 SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4122 lumens
Efficiency: N/A
Efficacy: 141.6 lumens/watt
Luminous Opening: Circular (Dia: 0.33' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G1

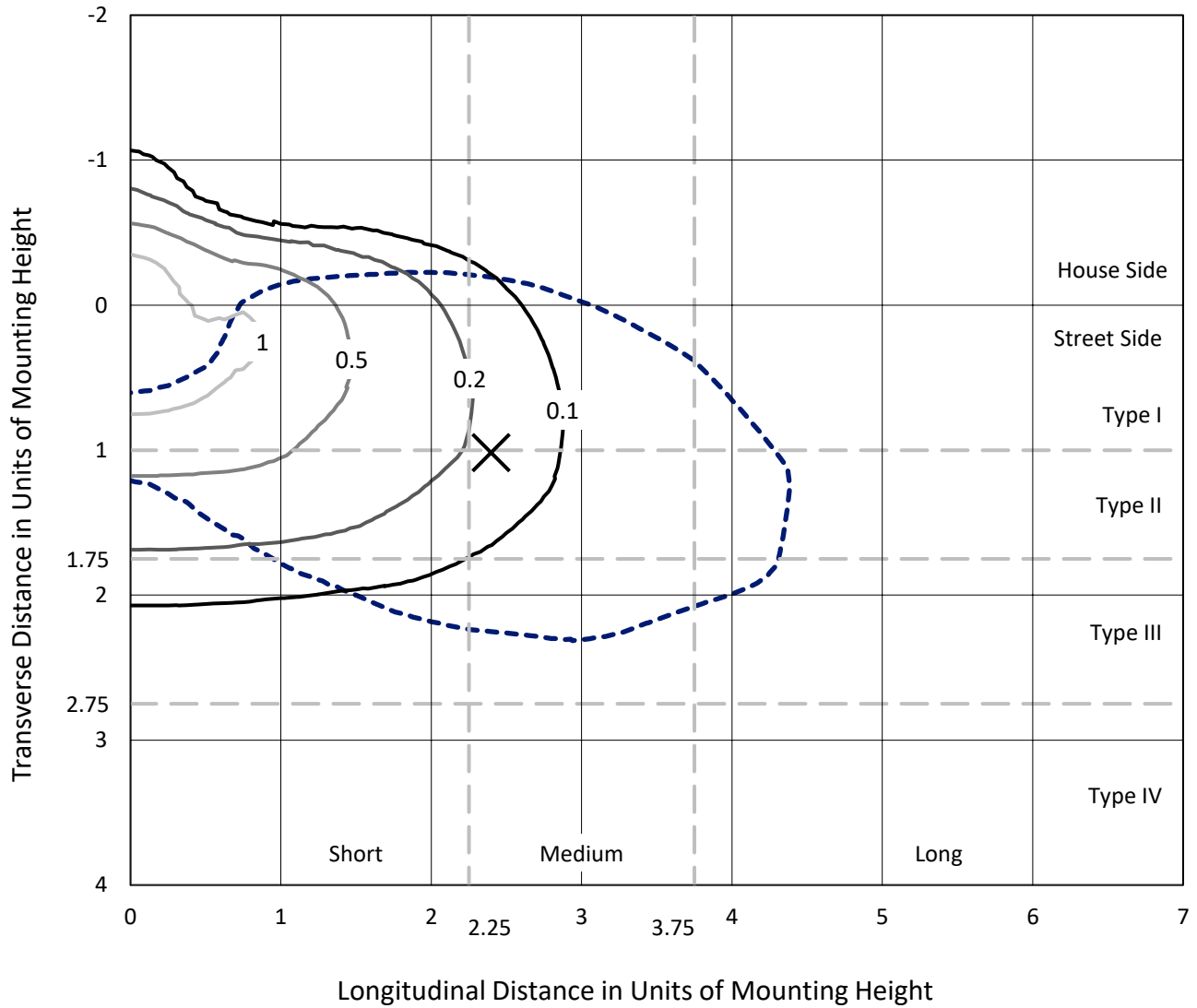
Input Watts (W): 29.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P272719
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Iso-Footcandle Lines of Horizontal Illumination

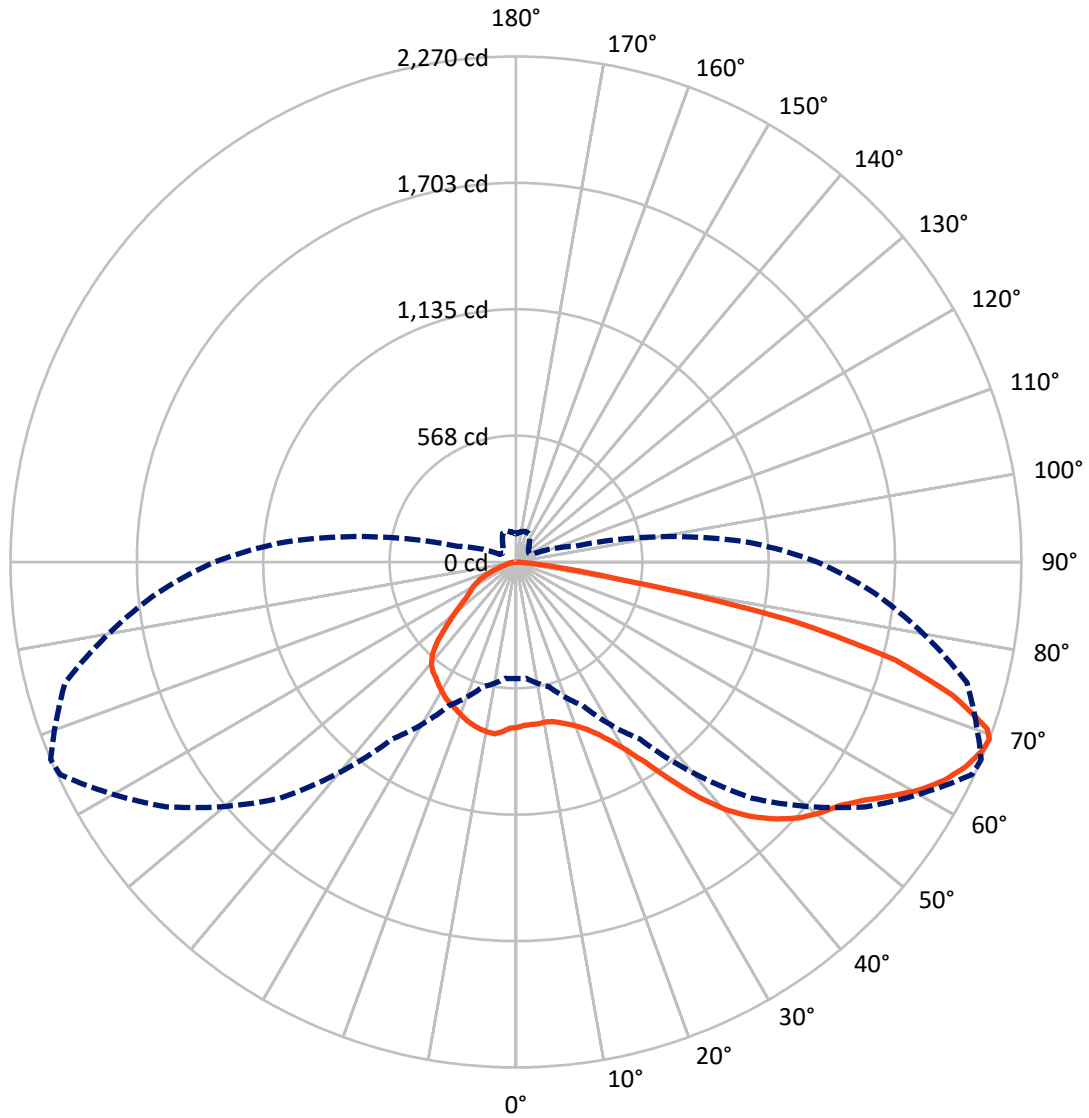
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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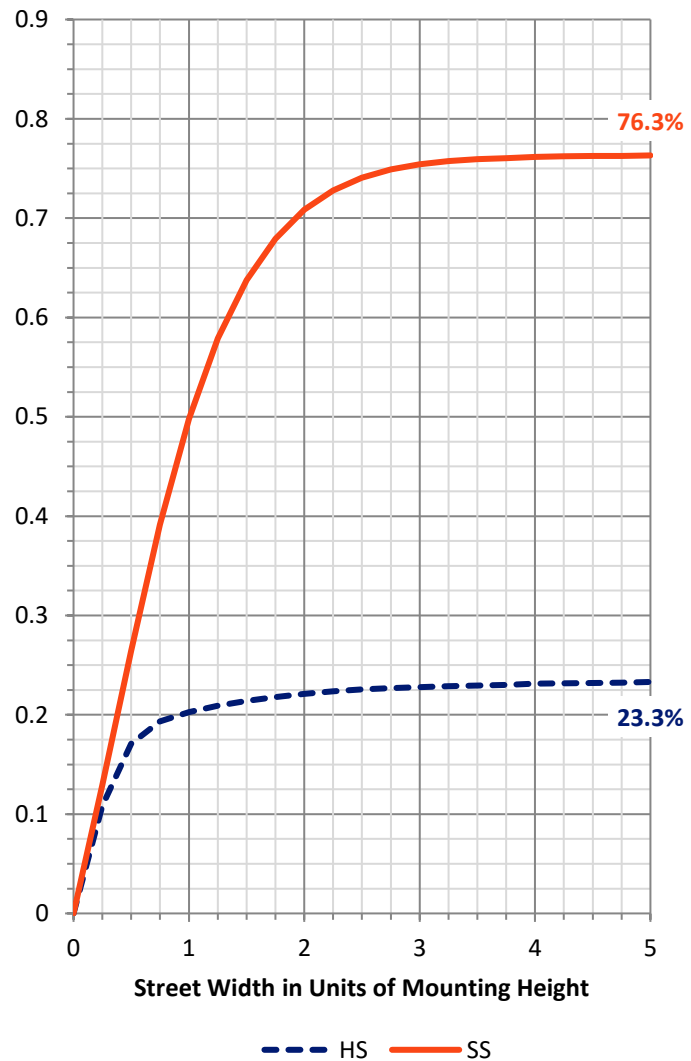
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	974.5	0.0	974.5
	% Fixture	23.6	0.0	23.6
Street Side	Lumens	3147.5	0.0	3147.5
	% Fixture	76.4	0.0	76.4
Total	Lumens	4122.0	0.0	4122.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.4	1.8
10°-20°	222.8	5.4
20°-30°	366.8	8.9
30°-40°	531.6	12.9
40°-50°	711.6	17.3
50°-60°	840.1	20.4
60°-70°	867.0	21.0
70°-80°	473.5	11.5
80°-90°	35.2	0.9
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°-90°	4122.0	100.0
0°-180°	4122.0	100.0

Coefficient of Utilization

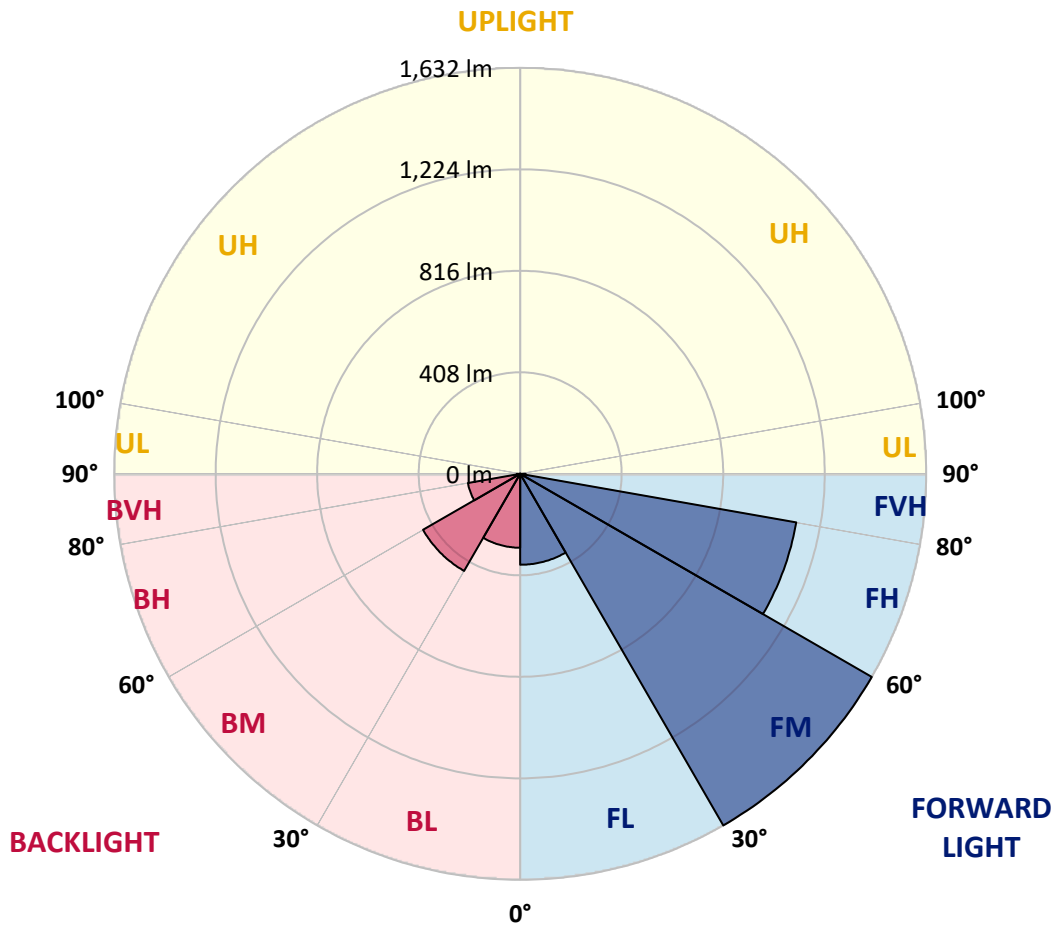


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 CATALOG NUMBER: CTKR2-B1-D-UNV-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	365.7	8.9			
FM (30°-60°)	1632.4	39.6			
FH (60°-80°)	1127.2	27.3			G1/1800
FVH (80°-90°)	22.2	0.5			G1/100
BL (0°-30°)	297.2	7.2	B1/500		
BM (30°-60°)	450.9	10.9	B1/1000		
BH (60°-80°)	213.3	5.2	B1/500		G1/500
BVH (80°-90°)	13.1	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1
 Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0
2.5°	733.1	732.6	733.6	733.6	733.1	734.1	734.6	734.6	734.6	735.1	735.6
5°	743.5	743.0	742.5	741.5	739.5	738.0	736.1	733.6	733.1	734.1	736.1
7.5°	762.4	761.4	759.9	755.4	749.5	744.5	740.0	734.1	734.1	732.6	736.1
10°	781.7	780.7	776.2	770.8	761.9	750.9	742.0	732.1	730.6	728.1	733.1
12.5°	811.5	810.0	804.0	794.1	780.7	765.3	750.9	737.6	735.6	732.6	737.6
15°	846.2	844.7	837.7	825.3	808.5	785.7	768.3	751.4	749.0	745.0	748.5
17.5°	881.4	879.4	873.0	861.1	839.2	812.0	789.6	768.8	766.3	762.8	762.8
20°	921.6	919.6	912.6	896.8	874.9	844.7	815.4	790.6	787.6	785.7	778.2
22.5°	964.2	961.7	955.3	939.9	916.1	881.9	846.2	818.9	815.9	815.9	799.1
25°	1015.3	1012.3	1005.9	988.5	966.7	931.0	888.8	858.6	857.1	856.1	828.3
27.5°	1064.4	1061.4	1059.0	1045.6	1025.7	990.5	943.4	911.2	910.7	908.7	867.5
30°	1115.0	1112.5	1109.6	1101.6	1087.7	1055.0	1009.9	979.6	980.1	978.1	921.1
32.5°	1158.2	1160.6	1165.6	1163.6	1154.7	1129.4	1084.3	1067.9	1074.8	1084.8	1024.2
35°	1200.8	1202.8	1218.7	1228.6	1229.1	1207.8	1180.0	1189.4	1206.3	1243.5	1165.6
37.5°	1231.6	1233.1	1248.9	1270.3	1288.1	1283.2	1287.1	1324.3	1344.7	1376.4	1284.6
40°	1256.4	1260.3	1280.7	1311.9	1351.1	1367.0	1392.8	1444.9	1467.2	1476.1	1360.0
42.5°	1236.5	1239.0	1282.7	1348.1	1412.1	1459.2	1491.5	1547.5	1565.4	1555.0	1429.5
45°	1215.7	1218.2	1261.8	1364.0	1462.7	1543.6	1580.8	1630.9	1646.7	1617.0	1482.1
47.5°	1180.0	1185.4	1238.5	1351.6	1500.9	1623.9	1660.6	1711.2	1717.7	1671.0	1525.2
50°	1141.3	1148.2	1209.3	1338.7	1526.7	1684.9	1722.1	1764.3	1770.2	1720.1	1567.9
52.5°	1096.2	1102.1	1169.1	1313.4	1539.6	1726.1	1758.3	1809.4	1818.3	1781.6	1616.5
55°	1046.1	1051.5	1119.0	1272.7	1529.7	1738.0	1788.6	1879.8	1890.8	1848.1	1658.6
57.5°	985.1	993.0	1065.9	1219.7	1497.4	1746.4	1845.6	1968.6	1982.5	1917.0	1691.4
60°	920.6	925.5	997.5	1155.2	1443.9	1750.9	1909.6	2065.8	2080.2	1979.0	1718.1
62.5°	838.7	844.2	911.2	1064.4	1367.5	1732.0	1958.2	2154.1	2158.6	2034.1	1732.0
65°	720.2	725.6	801.0	956.3	1254.4	1673.5	1968.1	2211.7	2218.6	2077.3	1719.6
67.5°	604.6	607.1	665.1	813.4	1096.7	1581.3	1943.3	2245.9	2259.8	2108.5	1677.0
69°	523.3	524.8	581.3	711.3	970.7	1499.9	1916.5	2258.8	2270.2	2097.1	1618.9
70°	464.8	465.2	517.3	630.4	875.4	1424.0	1886.8	2243.4	2245.9	2057.9	1566.4
72.5°	331.8	334.3	362.1	431.0	613.1	1124.9	1704.3	2046.5	2052.9	1875.9	1375.9
75°	121.5	124.5	143.8	204.4	281.2	698.4	1351.6	1736.0	1759.8	1633.3	1112.0
77.5°	27.3	27.8	31.7	43.6	53.1	143.8	678.0	1182.0	1259.8	1161.6	688.4
80°	21.8	21.8	24.8	31.7	35.2	75.9	211.8	425.6	457.3	405.7	203.4
82.5°	16.4	16.4	17.9	19.8	18.4	41.2	83.8	150.8	161.7	141.4	105.6
85°	9.9	9.9	9.9	9.4	6.0	12.4	13.9	22.3	25.8	22.8	26.3
87.5°	4.5	4.5	3.5	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P272719
 CATALOG NUMBER: CTKR2-B1-D-UNV-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0
2.5°	737.1	738.0	742.0	747.5	755.4	762.4	768.8	773.8	776.7	778.7	778.7
5°	739.0	743.0	752.9	766.8	781.7	795.1	808.0	816.4	821.4	824.4	824.8
7.5°	741.0	746.5	763.3	781.2	799.1	813.4	826.3	836.3	842.2	844.7	846.2
10°	738.0	745.5	761.4	777.2	793.6	810.5	824.8	836.8	843.2	845.2	847.7
12.5°	743.0	747.5	756.9	769.8	784.7	799.1	814.9	826.8	836.8	841.2	844.2
15°	750.9	750.9	752.9	758.9	770.8	783.7	796.1	805.0	812.9	820.4	823.4
17.5°	759.9	754.9	748.5	746.0	749.0	754.4	763.3	766.8	774.8	781.7	785.7
20°	771.3	761.4	743.0	727.6	719.7	715.2	718.7	720.2	726.1	730.6	736.1
22.5°	786.7	770.8	740.0	709.8	688.4	671.1	664.6	662.7	663.2	667.6	673.6
25°	810.5	786.2	738.5	691.9	654.7	623.5	605.6	594.7	592.7	599.2	605.1
27.5°	841.2	807.5	739.5	677.0	617.0	567.9	535.2	517.3	518.8	525.3	530.2
30°	881.4	835.8	741.5	653.2	574.4	504.4	454.8	430.0	426.6	429.0	438.0
32.5°	965.7	887.3	744.0	630.4	525.3	433.5	366.5	336.8	337.3	356.1	363.6
35°	1094.7	995.0	764.8	599.7	472.2	355.6	277.3	270.3	289.7	316.4	327.9
37.5°	1202.3	1090.2	820.4	567.4	408.2	271.8	209.3	212.8	234.6	260.9	274.3
40°	1270.8	1150.7	861.1	530.2	317.4	192.0	153.3	159.7	192.4	222.7	232.6
42.5°	1332.3	1204.8	886.9	478.1	219.2	135.9	115.1	139.4	176.1	206.3	214.8
45°	1377.4	1245.5	887.3	408.2	144.8	109.1	108.1	129.5	166.7	193.9	199.4
47.5°	1419.1	1281.2	861.6	322.9	111.6	102.7	104.7	126.5	165.2	191.0	193.4
50°	1459.7	1313.9	811.5	259.9	104.7	98.7	102.2	126.5	163.7	183.0	184.0
52.5°	1496.4	1335.7	737.6	208.3	101.7	96.2	102.7	129.5	163.7	175.1	175.1
55°	1524.2	1333.7	686.0	166.2	99.2	94.7	105.2	133.4	162.7	166.2	166.2
57.5°	1538.6	1314.4	638.8	145.8	96.2	94.2	107.1	138.9	161.7	169.1	170.6
60°	1537.6	1295.1	597.2	132.4	92.8	94.7	109.6	138.9	186.5	201.4	197.9
62.5°	1525.2	1272.7	528.2	119.0	88.3	92.3	110.1	146.3	257.4	249.5	246.0
65°	1489.5	1213.7	447.4	104.7	82.3	87.8	109.6	158.7	189.5	181.5	175.6
67.5°	1416.6	1116.0	338.3	90.3	74.4	82.3	106.6	153.3	159.2	152.8	146.8
69°	1353.6	1036.6	270.3	82.3	69.4	78.9	104.2	140.4	142.8	132.4	126.0
70°	1288.1	971.7	208.8	76.4	65.5	76.4	104.2	134.4	132.4	119.5	114.1
72.5°	1086.7	755.9	119.0	61.0	52.6	69.4	102.2	124.0	124.5	108.1	100.2
75°	824.8	499.0	83.8	45.1	39.7	60.5	90.3	113.6	120.5	104.7	94.2
77.5°	442.9	180.5	61.0	31.2	24.8	44.6	69.4	94.2	105.6	90.8	78.4
80°	130.9	91.3	42.7	21.8	17.4	25.8	45.6	71.9	98.7	94.2	88.8
82.5°	83.8	59.5	28.8	14.9	12.9	14.4	20.8	45.6	79.4	88.3	96.2
85°	23.3	17.9	10.4	6.4	6.4	7.4	7.4	19.8	44.6	62.0	73.4
87.5°	2.5	2.5	2.5	2.5	2.5	2.5	3.5	5.5	7.9	15.9	20.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)