

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: P198164

Luminaire Tested: **TT-C2-LED-E1-DL-LWR-LW-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198164
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34705)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TT-C2-LED-E1-DL-LWR-LW-7060
Description: TOPTIER LED PARKING GARAGE LUMINAIRE
DRIVE LANE DISTRIBUTION WITH LumaWatt WIRELESS SENSOR
Light Source: (160) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3437.9 lumens
Efficiency: N/A
Efficacy: 83.0 lumens/watt
Luminous Opening: Circular (Dia: 1.12' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

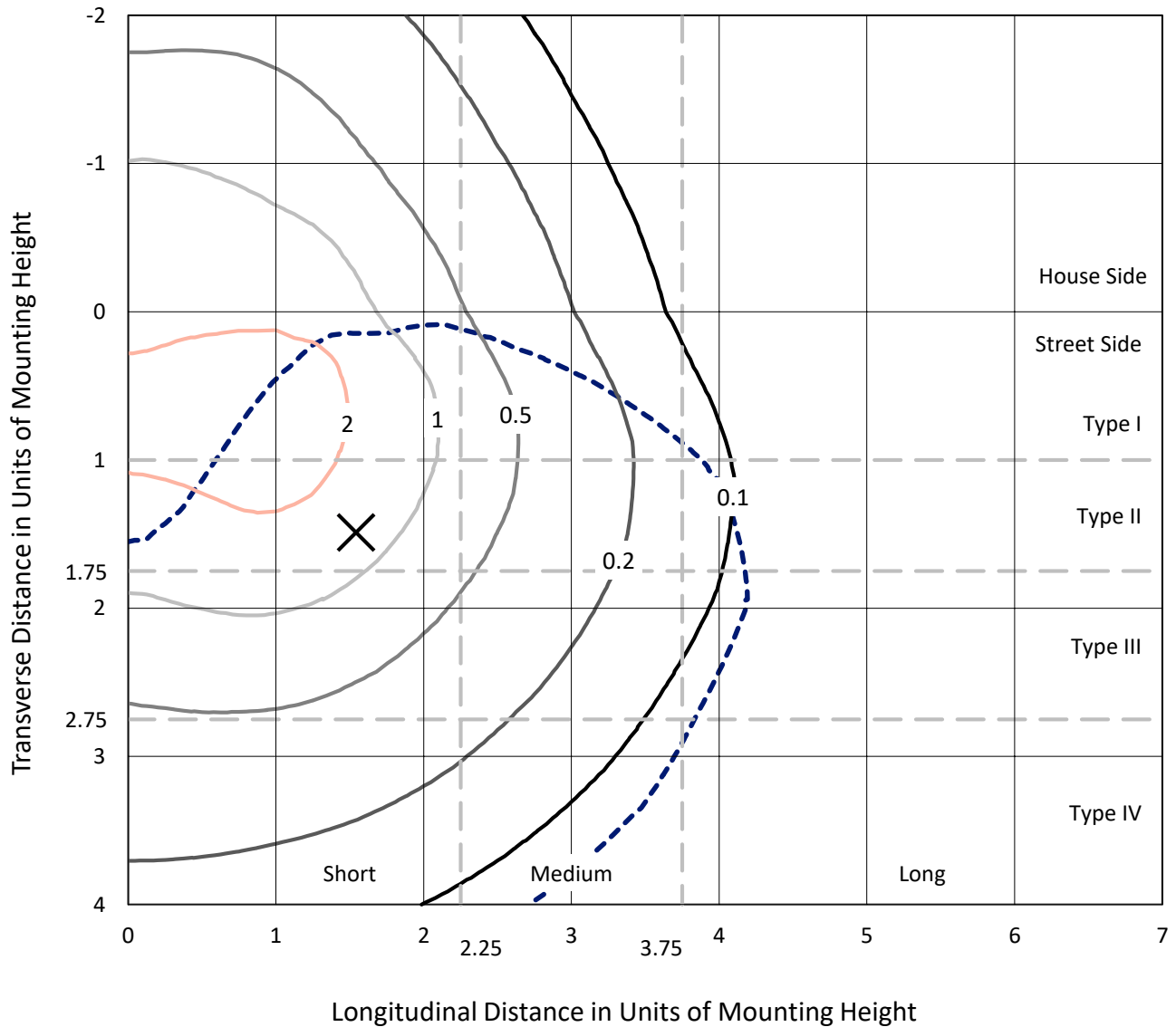
Input Watts (W): 41.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

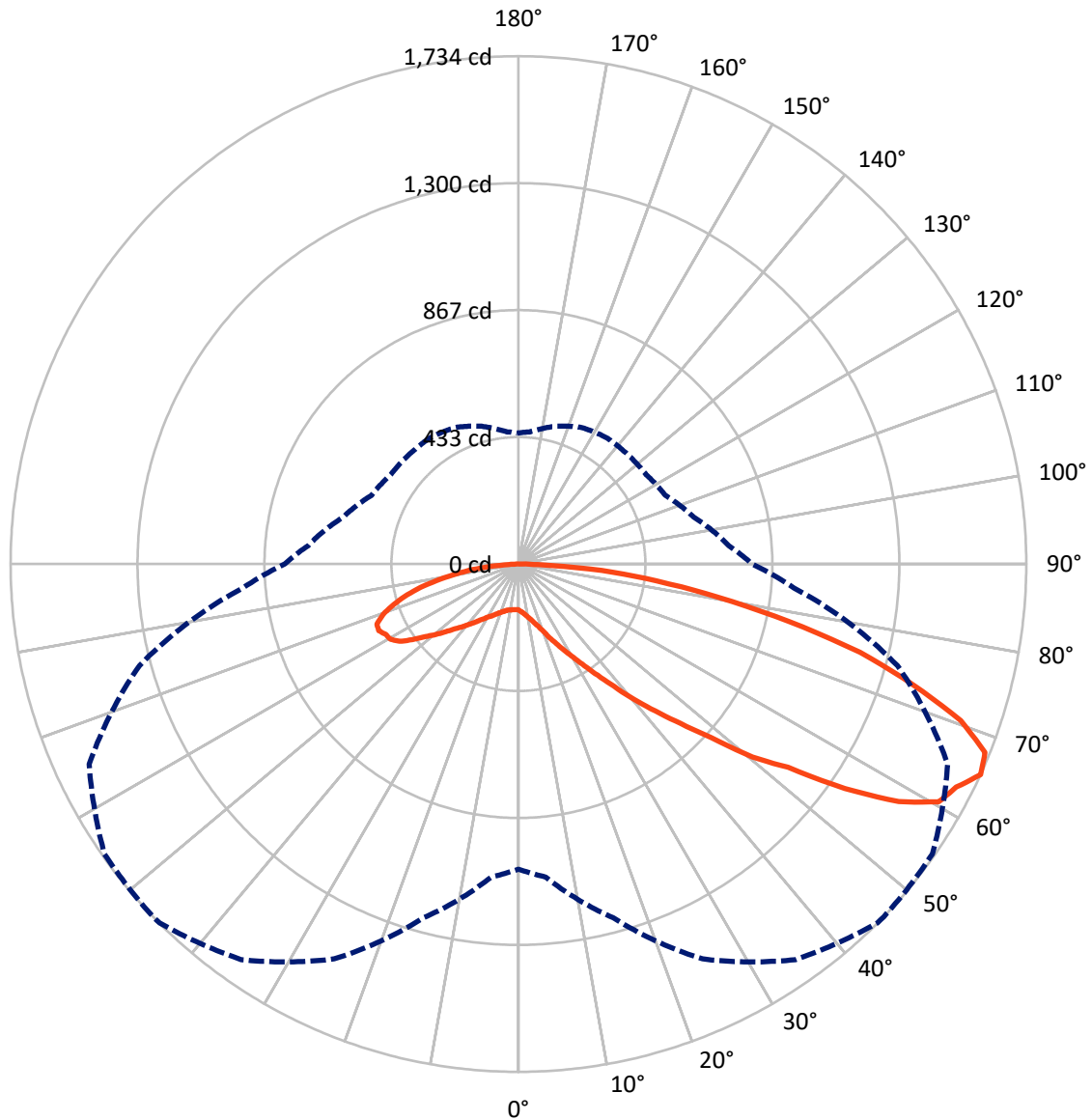
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.8 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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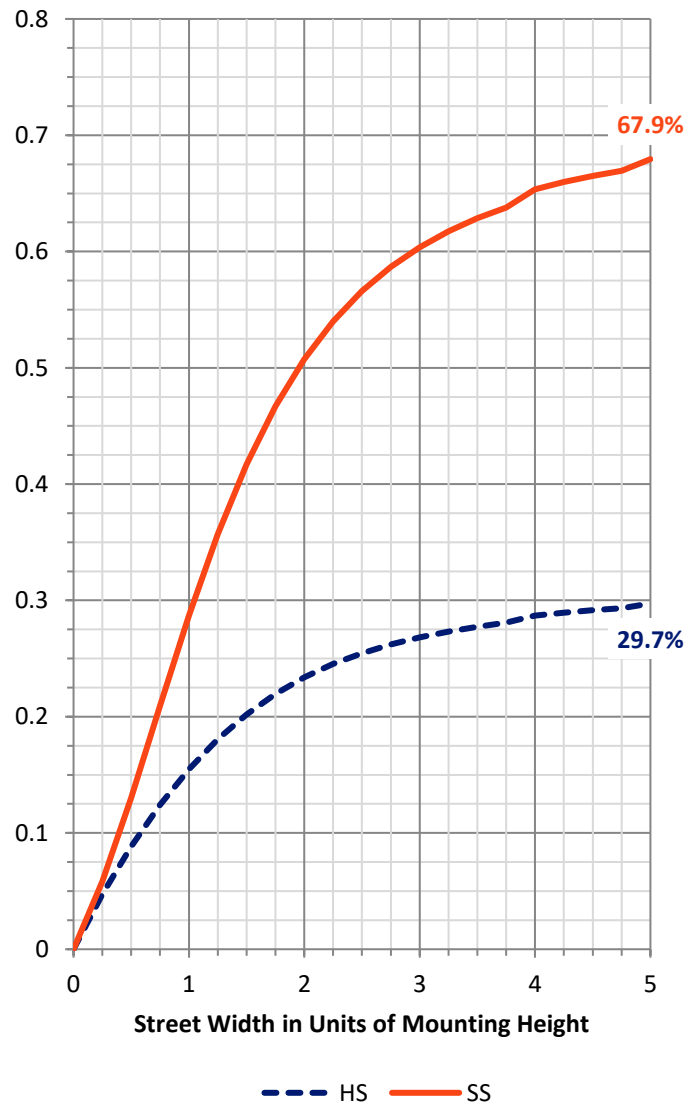
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1044.0	0.0	1044.0
	% Fixture	30.4	0.0	30.4
Street Side	Lumens	2393.9	0.0	2393.9
	% Fixture	69.6	0.0	69.6
Total	Lumens	3437.9	0.0	3437.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.8	0.5
10°-20°	53.9	1.6
20°-30°	113.8	3.3
30°-40°	216.2	6.3
40°-50°	399.4	11.6
50°-60°	700.1	20.4
60°-70°	950.0	27.6
70°-80°	772.4	22.5
80°-90°	216.4	6.3
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°	3437.9	100.0
0°-180°	3437.9	100.0



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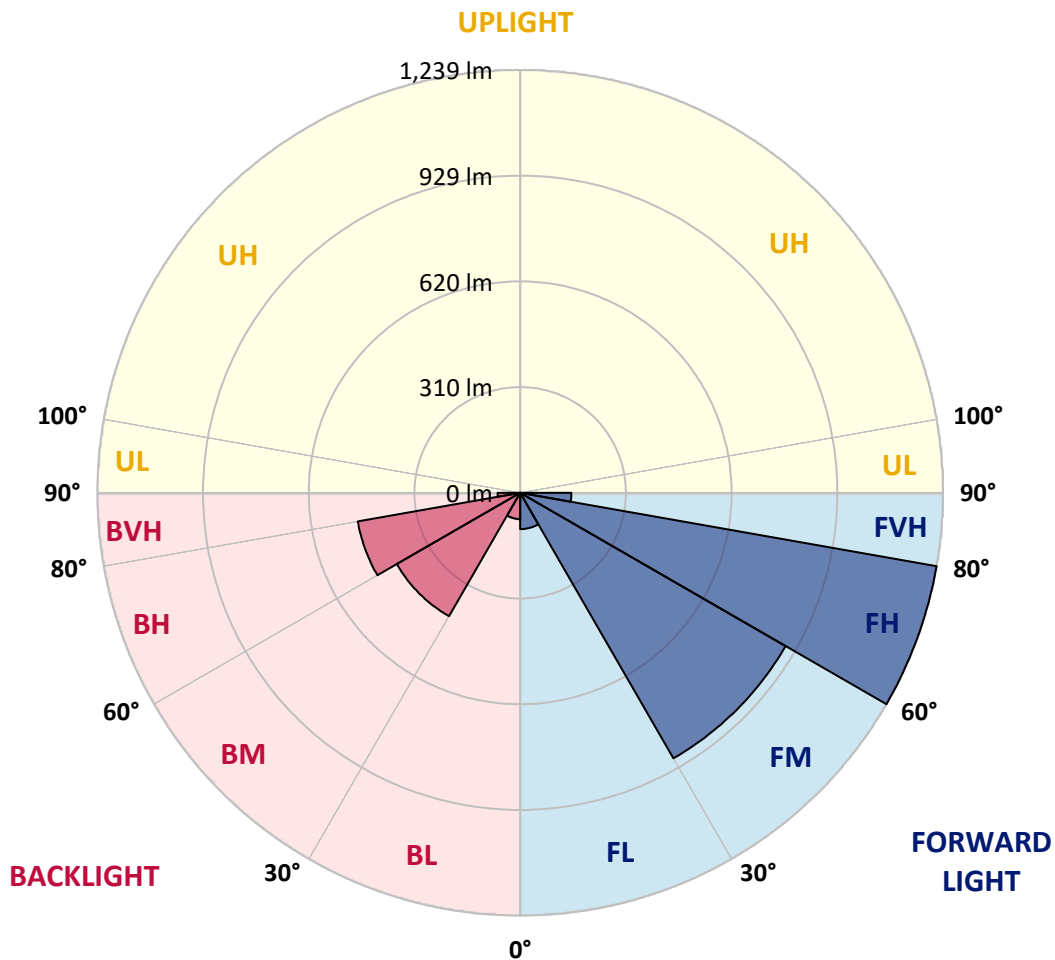
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	106.4	3.1			
FM	(30°-60°)	898.2	26.1			
FH	(60°-80°)	1239.2	36.0			G1/1800
FVH	(80°-90°)	150.2	4.4			G2/225
BL	(0°-30°)	77.1	2.2	B0/110		
BM	(30°-60°)	417.5	12.1	B1/1000		
BH	(60°-80°)	483.2	14.1	B1/500		G1/500
BVH	(80°-90°)	66.2	1.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	156.5	156.5	156.5	156.5	156.5	156.5	156.5	156.5	156.5	156.5	156.5
2.5°	162.7	163.4	163.4	163.4	162.7	162.0	162.0	161.4	160.7	160.7	160.0
5°	170.4	170.4	170.4	169.7	169.0	168.3	167.6	166.9	164.8	163.4	162.7
7.5°	179.4	179.4	179.4	178.7	177.3	175.3	176.0	173.9	171.8	169.0	166.2
10°	189.9	190.6	191.3	189.2	187.8	185.7	185.0	182.2	179.4	176.0	172.5
12.5°	202.4	201.7	203.1	201.0	199.6	196.1	195.4	192.0	187.1	182.9	178.7
15°	217.7	218.4	217.7	216.3	213.5	210.0	210.0	205.2	199.6	193.3	186.4
17.5°	239.2	239.2	236.5	235.8	230.9	226.7	225.3	221.2	212.1	204.5	196.1
20°	262.9	261.5	258.0	258.7	254.5	248.3	246.9	239.9	230.2	218.4	207.3
22.5°	290.0	288.6	284.5	283.8	278.2	273.3	273.3	263.6	250.4	235.1	219.8
25°	311.6	312.3	313.0	313.7	309.5	301.8	301.1	290.7	273.3	253.9	233.7
27.5°	338.0	341.5	340.8	344.3	342.2	335.2	333.8	322.7	301.1	278.2	253.2
30°	367.9	372.8	370.0	377.0	377.0	372.1	369.3	358.2	336.6	303.9	274.0
32.5°	401.3	402.0	406.2	415.2	419.4	416.6	414.5	404.1	376.3	340.1	301.1
35°	439.5	436.1	443.0	460.4	466.7	467.4	466.7	454.2	429.1	384.6	335.2
37.5°	477.8	476.4	489.6	507.0	525.8	533.4	530.0	525.8	489.6	434.0	370.7
40°	514.0	520.2	537.6	559.2	589.1	607.2	607.9	599.5	562.0	494.5	413.1
42.5°	549.4	562.0	584.2	621.8	660.0	689.2	685.7	678.8	646.1	565.4	467.4
45°	598.1	610.6	632.9	678.1	739.3	775.5	776.2	788.7	760.9	660.7	541.1
47.5°	642.6	653.8	686.4	747.0	822.1	888.1	885.4	903.4	868.0	748.3	598.8
50°	703.8	700.4	748.3	832.5	934.7	1018.2	1036.3	1045.3	978.5	858.2	660.7
52.5°	758.1	754.6	814.4	927.1	1054.4	1162.2	1152.4	1174.7	1146.9	1007.1	792.9
55°	812.3	812.3	887.4	1035.6	1203.2	1344.4	1352.7	1390.3	1315.2	1118.3	839.5
57.5°	872.1	878.4	984.8	1169.8	1375.0	1529.4	1530.8	1534.2	1413.2	1162.9	852.0
60°	929.9	946.6	1085.0	1301.9	1510.6	1637.2	1648.3	1600.3	1450.8	1191.4	856.8
62.5°	993.8	1010.5	1180.2	1411.8	1610.7	1681.0	1677.5	1630.2	1512.7	1271.3	918.7
65°	1041.8	1073.1	1250.5	1487.6	1649.0	1732.5	1733.8	1725.5	1617.0	1339.5	944.5
67.5°	1090.5	1137.8	1286.6	1516.9	1676.1	1719.9	1717.8	1685.9	1574.6	1301.3	893.0
70°	1142.7	1177.5	1311.7	1490.4	1594.7	1600.3	1602.4	1556.5	1466.1	1222.7	828.3
72.5°	1160.8	1185.8	1273.4	1380.5	1429.2	1427.8	1408.4	1391.0	1314.5	1102.3	735.8
75°	1128.8	1130.9	1144.1	1190.7	1212.9	1194.1	1204.6	1178.8	1135.0	947.3	627.3
77.5°	1003.6	1000.1	962.6	945.9	946.6	942.4	943.1	911.8	893.0	780.3	509.1
80°	783.1	782.4	752.5	705.9	691.3	687.1	691.3	676.0	658.6	589.1	387.4
82.5°	543.2	534.8	521.6	484.8	482.7	474.3	476.4	473.6	465.3	418.7	274.7
85°	263.6	274.7	286.5	283.8	274.7	276.1	285.1	284.5	274.7	239.9	160.0
87.5°	36.2	52.2	54.2	52.2	66.1	82.8	66.1	67.5	54.2	55.6	35.5
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	156.5	156.5	156.5	156.5	156.5	156.5	156.5	156.5	156.5	156.5	156.5
2.5°	159.3	158.6	157.9	157.2	156.5	155.8	155.1	155.1	154.4	154.4	154.4
5°	162.0	161.4	160.0	158.6	157.9	156.5	155.8	155.1	153.7	153.7	153.0
7.5°	164.8	164.1	162.0	160.0	158.6	157.2	156.5	155.8	155.1	153.7	153.7
10°	170.4	168.3	165.5	162.7	160.0	158.6	157.2	156.5	156.5	155.8	155.8
12.5°	176.0	173.9	169.0	165.5	162.0	160.0	158.6	158.6	157.9	157.9	157.2
15°	182.9	180.1	174.6	169.7	165.5	163.4	161.4	161.4	161.4	161.4	161.4
17.5°	191.3	187.1	180.8	175.3	171.1	168.3	166.2	166.2	165.5	166.2	166.9
20°	202.4	196.8	188.5	181.5	176.7	174.6	173.2	172.5	172.5	173.2	173.9
22.5°	212.8	206.6	195.4	188.5	184.3	180.8	180.1	180.1	179.4	180.8	180.8
25°	225.3	217.7	205.9	196.8	191.3	188.5	188.5	188.5	189.2	189.9	188.5
27.5°	242.0	233.0	217.0	205.9	201.0	198.2	196.8	198.2	198.9	199.6	198.2
30°	258.7	249.0	228.8	216.3	209.3	206.6	206.6	208.0	208.6	209.3	208.0
32.5°	281.7	267.1	245.5	229.5	221.9	219.1	219.1	219.8	219.8	221.2	220.5
35°	313.7	293.5	266.4	247.6	236.5	232.3	231.6	232.3	233.7	233.0	235.8
37.5°	344.3	321.3	287.2	267.1	255.9	249.7	246.9	246.2	247.6	248.3	249.0
40°	380.4	352.6	313.0	287.9	274.0	267.1	262.9	262.9	262.2	262.9	260.1
42.5°	427.0	395.7	345.7	313.7	294.2	287.9	280.3	278.2	276.1	276.8	272.6
45°	490.3	450.7	390.9	348.4	322.7	309.5	301.8	295.6	292.8	291.4	287.2
47.5°	534.1	491.7	427.0	381.1	354.0	336.6	324.8	316.4	309.5	306.0	306.7
50°	592.6	537.6	470.8	415.2	387.4	367.9	354.0	339.4	329.0	324.8	326.9
52.5°	703.1	637.1	533.4	468.1	421.5	399.9	385.3	367.2	351.9	344.3	346.4
55°	740.0	672.5	577.3	510.5	468.8	442.3	419.4	397.8	377.6	365.1	365.8
57.5°	743.5	676.7	584.9	529.3	500.7	482.7	461.1	432.6	404.8	387.4	386.0
60°	740.0	671.8	583.5	527.2	507.0	506.3	493.1	468.1	435.4	409.6	407.6
62.5°	788.7	715.7	608.5	539.0	510.5	512.6	515.4	498.0	464.6	433.3	426.3
65°	797.7	720.5	619.0	553.6	532.0	527.9	525.8	514.0	486.8	452.8	447.2
67.5°	753.2	680.2	587.7	531.4	516.7	525.8	533.4	523.0	497.3	471.5	463.9
70°	694.1	628.0	541.8	489.6	481.3	495.2	511.9	515.4	500.7	479.9	477.1
72.5°	614.8	559.2	483.4	441.6	438.2	448.6	468.1	484.1	482.0	477.1	475.7
75°	523.7	480.6	414.5	382.5	382.5	395.7	410.3	427.7	440.9	449.3	451.4
77.5°	431.2	388.1	339.4	312.3	315.8	333.1	343.6	361.0	375.6	386.7	387.4
80°	324.1	300.4	258.0	243.4	244.8	256.6	271.2	281.7	293.5	303.2	300.4
82.5°	234.4	212.8	183.6	175.3	180.8	186.4	198.2	207.3	210.7	213.5	219.1
85°	134.9	128.7	112.7	107.8	109.2	114.8	121.7	123.8	127.3	125.9	128.7
87.5°	32.7	34.8	32.7	32.0	32.7	31.3	29.9	36.2	36.9	37.6	36.2
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)