

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: P198160

Luminaire Tested: **TT-C1-LED-E1-DL-LWR-LW-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198160
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-C1-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: 2855.6 lumens
Efficiency: N/A
Efficacy: 85.2 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): 33.5
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

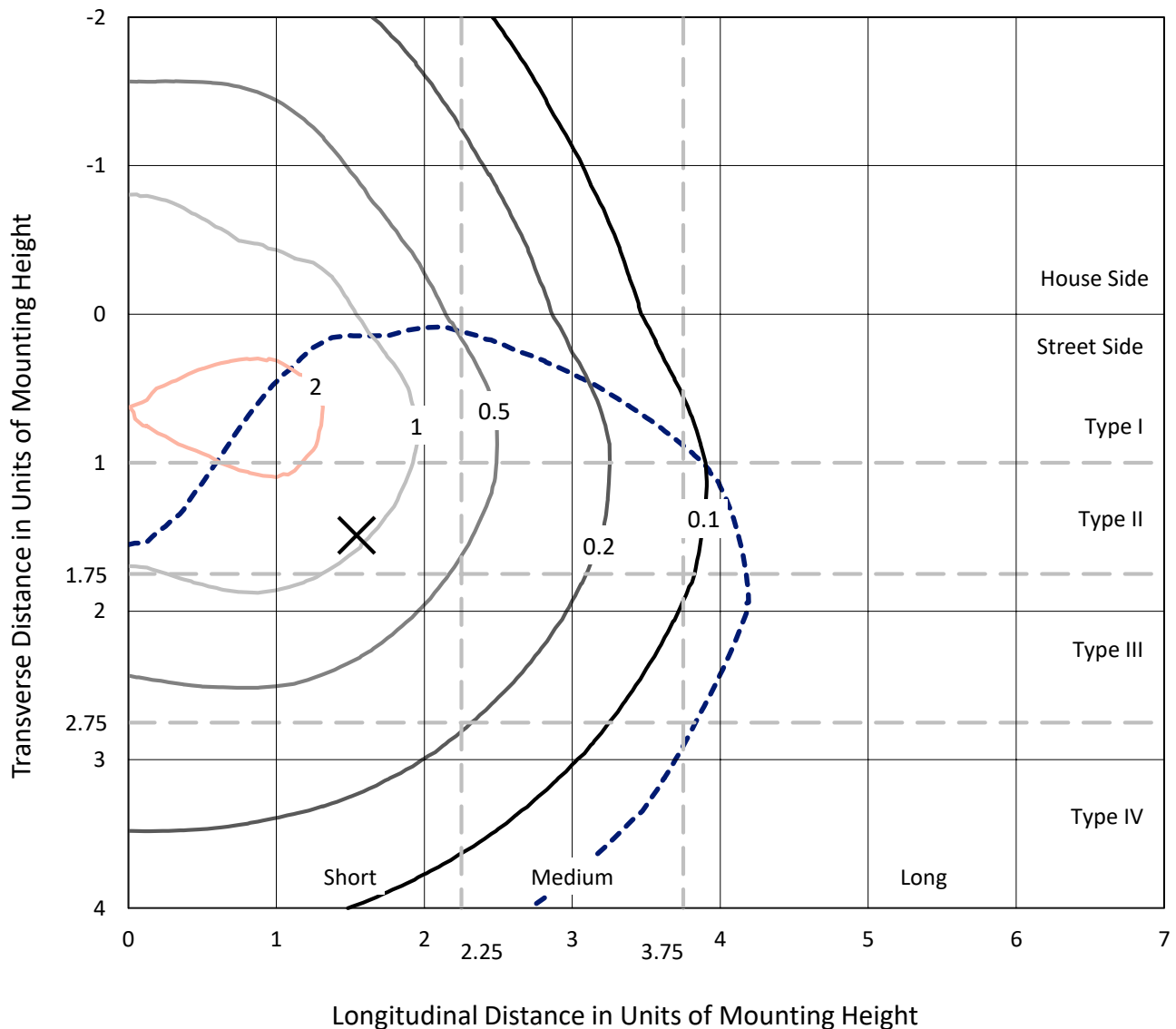


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

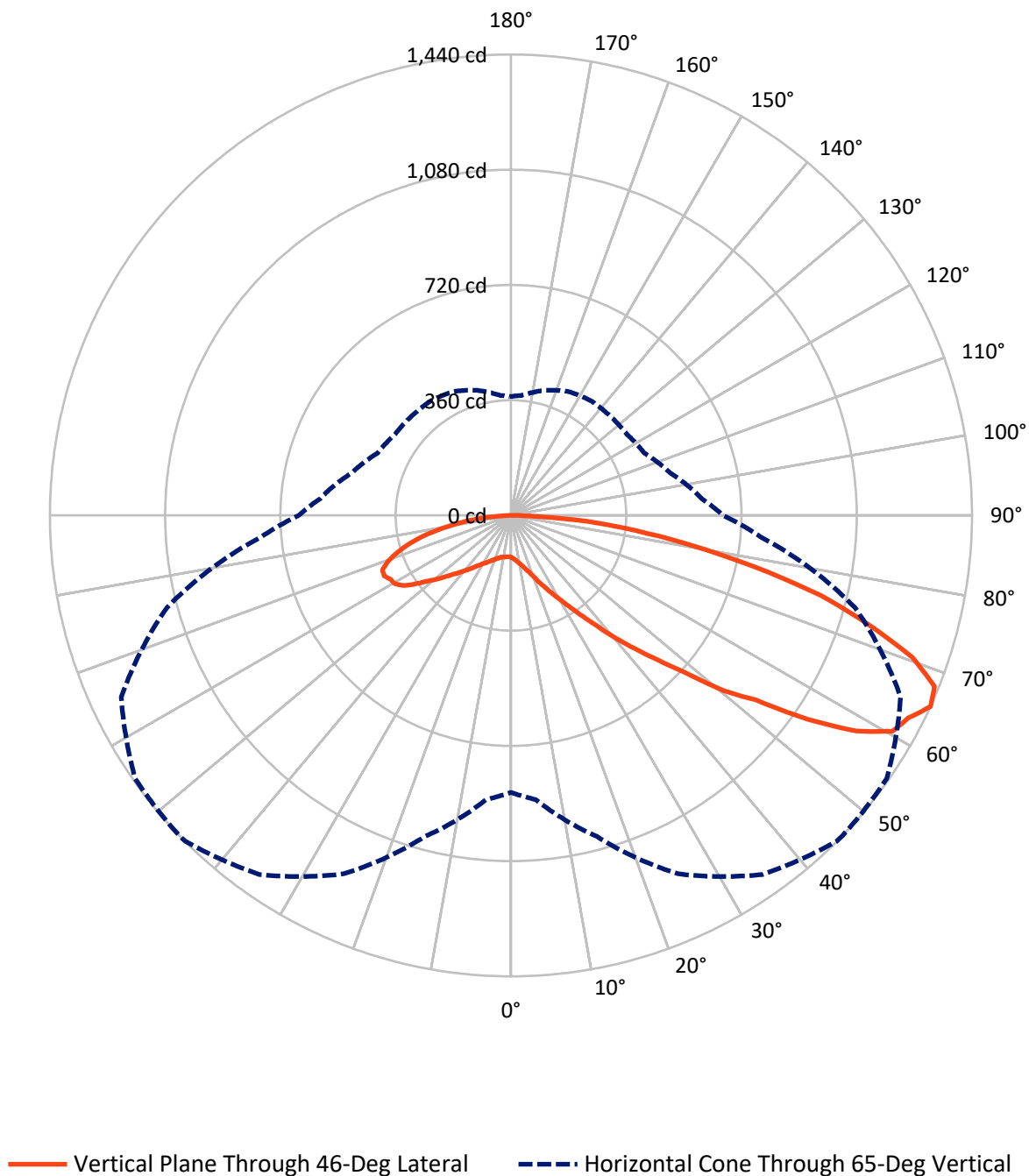


Based on 10 foot mounting height. Maximum calculated value = 2.3 fc
Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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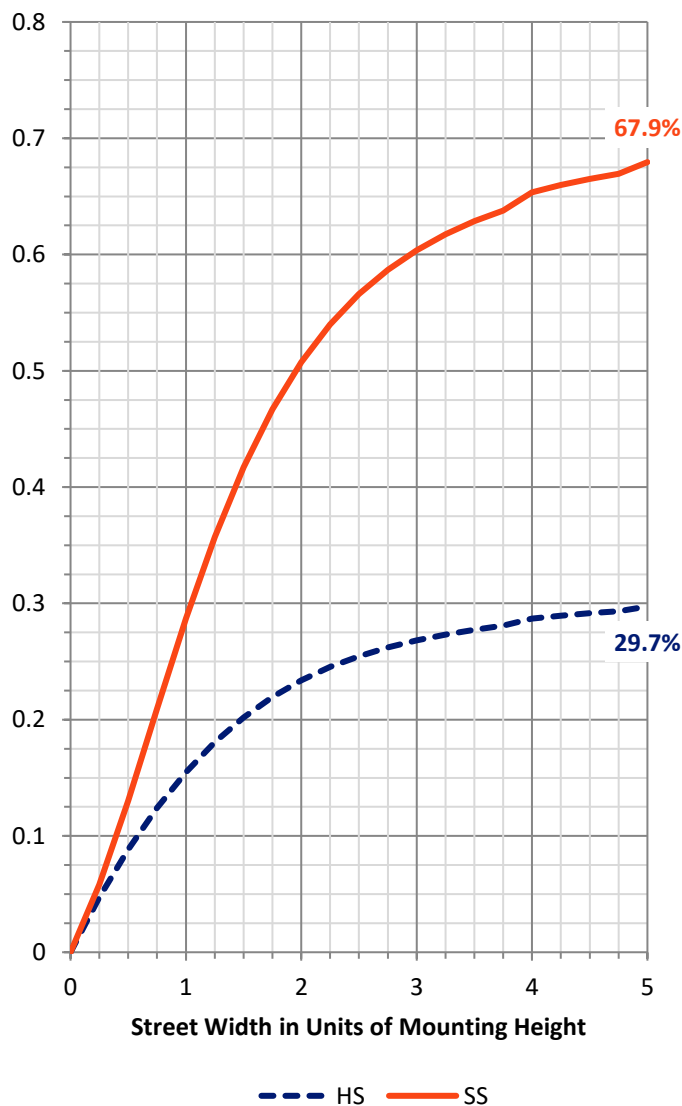
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	867.1	0.0	867.1
	% Fixture	30.4	0.0	30.4
Street Side	Lumens	1988.4	0.0	1988.4
	% Fixture	69.6	0.0	69.6
Total	Lumens	2855.6	0.0	2855.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.1	0.5
10°-20°	44.8	1.6
20°-30°	94.5	3.3
30°-40°	179.6	6.3
40°-50°	331.7	11.6
50°-60°	581.5	20.4
60°-70°	789.0	27.6
70°-80°	641.5	22.5
80°-90°	179.7	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°	2855.6	100.0
0°-180°	2855.6	100.0

Coefficient of Utilization



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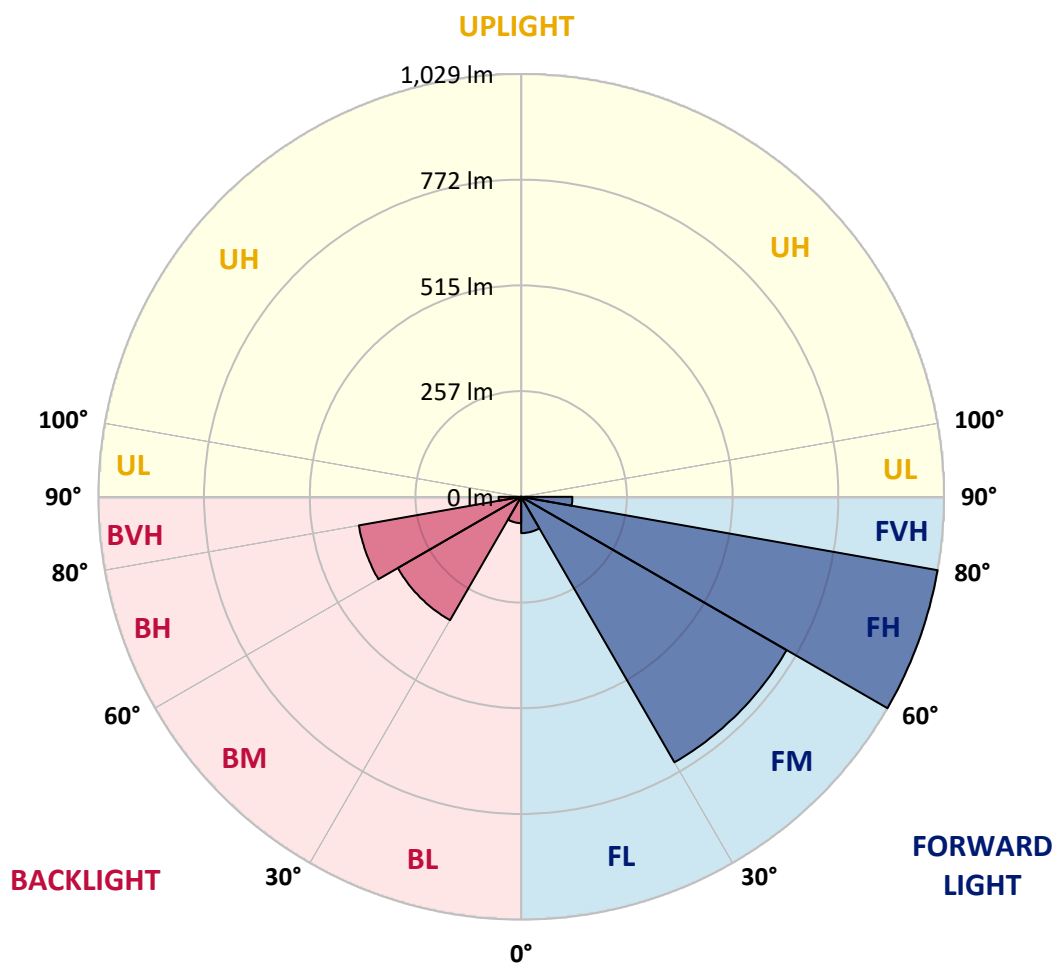
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	88.4	3.1			
FM	(30°-60°)	746.1	26.1			
FH	(60°-80°)	1029.3	36.0			G1/1800
FVH	(80°-90°)	124.7	4.4			G2/225
BL	(0°-30°)	64.0	2.2	B0/110		
BM	(30°-60°)	346.8	12.1	B1/1000		
BH	(60°-80°)	401.3	14.1	B1/500		G1/500
BVH	(80°-90°)	55.0	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°	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
2.5°	135.2	135.8	135.8	135.8	135.2	134.6	134.6	134.0	133.4	133.4	132.9
5°	141.5	141.5	141.5	141.0	140.4	139.8	139.2	138.6	136.9	135.8	135.2
7.5°	149.0	149.0	149.0	148.5	147.3	145.6	146.2	144.4	142.7	140.4	138.1
10°	157.7	158.3	158.9	157.1	156.0	154.2	153.7	151.4	149.0	146.2	143.3
12.5°	168.1	167.5	168.7	166.9	165.8	162.9	162.3	159.4	155.4	151.9	148.5
15°	180.8	181.4	180.8	179.7	177.3	174.5	174.5	170.4	165.8	160.6	154.8
17.5°	198.7	198.7	196.4	195.8	191.8	188.3	187.2	183.7	176.2	169.8	162.9
20°	218.4	217.2	214.3	214.9	211.4	206.2	205.1	199.3	191.2	181.4	172.1
22.5°	240.9	239.7	236.3	235.7	231.1	227.0	227.0	218.9	208.0	195.3	182.5
25°	258.8	259.4	260.0	260.5	257.1	250.7	250.1	241.5	227.0	210.9	194.1
27.5°	280.8	283.6	283.1	285.9	284.2	278.4	277.3	268.0	250.1	231.1	210.3
30°	305.6	309.6	307.3	313.1	313.1	309.1	306.7	297.5	279.6	252.4	227.6
32.5°	333.3	333.9	337.4	344.9	348.3	346.0	344.3	335.6	312.5	282.5	250.1
35°	365.1	362.2	368.0	382.4	387.6	388.2	387.6	377.2	356.4	319.5	278.4
37.5°	396.9	395.7	406.7	421.1	436.7	443.1	440.2	436.7	406.7	360.5	307.9
40°	426.9	432.1	446.5	464.5	489.3	504.3	504.9	498.0	466.8	410.7	343.1
42.5°	456.4	466.8	485.2	516.4	548.2	572.5	569.6	563.8	536.7	469.7	388.2
45°	496.8	507.2	525.7	563.2	614.1	644.1	644.7	655.1	632.0	548.8	449.4
47.5°	533.8	543.0	570.2	620.4	682.8	737.7	735.4	750.4	720.9	621.6	497.4
50°	584.6	581.7	621.6	691.5	776.4	845.7	860.7	868.2	812.8	712.9	548.8
52.5°	629.7	626.8	676.5	770.0	875.8	965.3	957.2	975.7	952.6	836.5	658.5
55°	674.7	674.7	737.1	860.2	999.4	1116.6	1123.6	1154.8	1092.4	928.9	697.3
57.5°	724.4	729.6	818.0	971.6	1142.1	1270.3	1271.5	1274.4	1173.8	965.9	707.7
60°	772.4	786.2	901.2	1081.4	1254.7	1359.8	1369.1	1329.2	1205.0	989.6	711.7
62.5°	825.5	839.4	980.3	1172.7	1337.9	1396.2	1393.4	1354.1	1256.4	1056.0	763.1
65°	865.4	891.4	1038.7	1235.6	1369.7	1439.0	1440.1	1433.2	1343.1	1112.6	784.5
67.5°	905.8	945.1	1068.7	1259.9	1392.2	1428.6	1426.9	1400.3	1307.9	1080.8	741.7
70°	949.1	978.0	1089.5	1238.0	1324.6	1329.2	1331.0	1292.8	1217.7	1015.6	688.0
72.5°	964.1	984.9	1057.7	1146.7	1187.1	1186.0	1169.8	1155.4	1091.8	915.6	611.2
75°	937.6	939.3	950.3	989.0	1007.5	991.9	1000.5	979.2	942.8	786.8	521.1
77.5°	833.6	830.7	799.5	785.6	786.2	782.8	783.3	757.3	741.7	648.2	422.9
80°	650.5	649.9	625.0	586.3	574.2	570.7	574.2	561.5	547.1	489.3	321.8
82.5°	451.2	444.2	433.3	402.6	400.9	394.0	395.7	393.4	386.5	347.8	228.2
85°	218.9	228.2	238.0	235.7	228.2	229.3	236.8	236.3	228.2	199.3	132.9
87.5°	30.0	43.3	45.1	43.3	54.9	68.7	54.9	56.0	45.1	46.2	29.5
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°	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
2.5°	132.3	131.7	131.1	130.6	130.0	129.4	128.8	128.8	128.2	128.2	128.2
5°	134.6	134.0	132.9	131.7	131.1	130.0	129.4	128.8	127.7	127.7	127.1
7.5°	136.9	136.3	134.6	132.9	131.7	130.6	130.0	129.4	128.8	127.7	127.7
10°	141.5	139.8	137.5	135.2	132.9	131.7	130.6	130.0	130.0	129.4	129.4
12.5°	146.2	144.4	140.4	137.5	134.6	132.9	131.7	131.7	131.1	131.1	130.6
15°	151.9	149.6	145.0	141.0	137.5	135.8	134.0	134.0	134.0	134.0	134.0
17.5°	158.9	155.4	150.2	145.6	142.1	139.8	138.1	138.1	137.5	138.1	138.6
20°	168.1	163.5	156.6	150.8	146.7	145.0	143.8	143.3	143.3	143.8	144.4
22.5°	176.8	171.6	162.3	156.6	153.1	150.2	149.6	149.6	149.0	150.2	150.2
25°	187.2	180.8	171.0	163.5	158.9	156.6	156.6	156.6	157.1	157.7	156.6
27.5°	201.0	193.5	180.2	171.0	166.9	164.6	163.5	164.6	165.2	165.8	164.6
30°	214.9	206.8	190.1	179.7	173.9	171.6	171.6	172.7	173.3	173.9	172.7
32.5°	234.0	221.8	203.9	190.6	184.3	182.0	182.0	182.5	182.5	183.7	183.1
35°	260.5	243.8	221.2	205.7	196.4	192.9	192.4	192.9	194.1	193.5	195.8
37.5°	285.9	266.9	238.6	221.8	212.6	207.4	205.1	204.5	205.7	206.2	206.8
40°	316.0	292.9	260.0	239.2	227.6	221.8	218.4	218.4	217.8	218.4	216.1
42.5°	354.7	328.7	287.1	260.5	244.4	239.2	232.8	231.1	229.3	229.9	226.4
45°	407.3	374.3	324.7	289.4	268.0	257.1	250.7	245.5	243.2	242.0	238.6
47.5°	443.7	408.4	354.7	316.6	294.0	279.6	269.8	262.8	257.1	254.2	254.8
50°	492.2	446.5	391.1	344.9	321.8	305.6	294.0	281.9	273.2	269.8	271.5
52.5°	584.0	529.2	443.1	388.8	350.1	332.2	320.0	305.0	292.3	285.9	287.7
55°	614.6	558.6	479.5	424.0	389.4	367.4	348.3	330.4	313.7	303.3	303.9
57.5°	617.5	562.1	485.8	439.6	415.9	400.9	383.0	359.3	336.2	321.8	320.6
60°	614.6	558.0	484.7	437.9	421.1	420.5	409.6	388.8	361.6	340.3	338.5
62.5°	655.1	594.4	505.5	447.7	424.0	425.7	428.1	413.6	385.9	359.9	354.1
65°	662.6	598.5	514.1	459.8	441.9	438.5	436.7	426.9	404.4	376.1	371.4
67.5°	625.6	565.0	488.1	441.3	429.2	436.7	443.1	434.4	413.0	391.7	385.3
70°	576.5	521.6	450.0	406.7	399.8	411.3	425.2	428.1	415.9	398.6	396.3
72.5°	510.7	464.5	401.5	366.8	363.9	372.6	388.8	402.1	400.3	396.3	395.1
75°	435.0	399.2	344.3	317.7	317.7	328.7	340.8	355.3	366.2	373.2	374.9
77.5°	358.2	322.3	281.9	259.4	262.3	276.7	285.4	299.8	311.9	321.2	321.8
80°	269.2	249.6	214.3	202.2	203.3	213.2	225.3	234.0	243.8	251.9	249.6
82.5°	194.7	176.8	152.5	145.6	150.2	154.8	164.6	172.1	175.0	177.3	182.0
85°	112.1	106.9	93.6	89.5	90.7	95.3	101.1	102.8	105.7	104.6	106.9
87.5°	27.2	28.9	27.2	26.6	27.2	26.0	24.8	30.0	30.6	31.2	30.0
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)