

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: P198159

Luminaire Tested: **TT-C1-LED-E1-DL-LWR-LW-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198159
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-7050
Description: TOPTIER LED PARKING GARAGE LUMINAIRE
DRIVE LANE DISTRIBUTION WITH LumaWatt WIRELESS SENSOR
Light Source: (160) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2877.3 lumens
Efficiency: N/A
Efficacy: 85.9 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



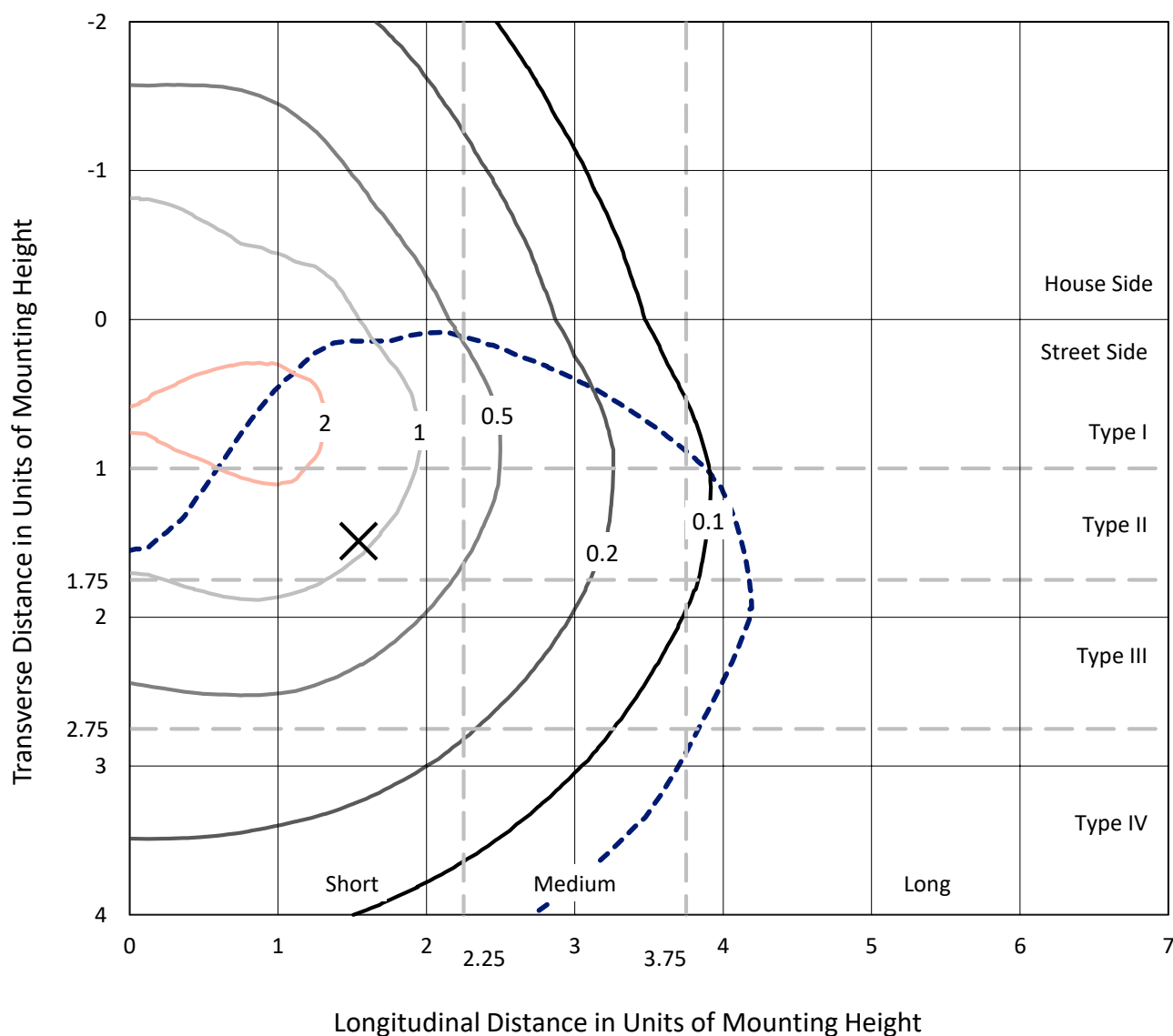
REPORT NUMBER: P198159

CATALOG NUMBER: TT-C1-LED-E1-DL-LWR-LW-7050

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

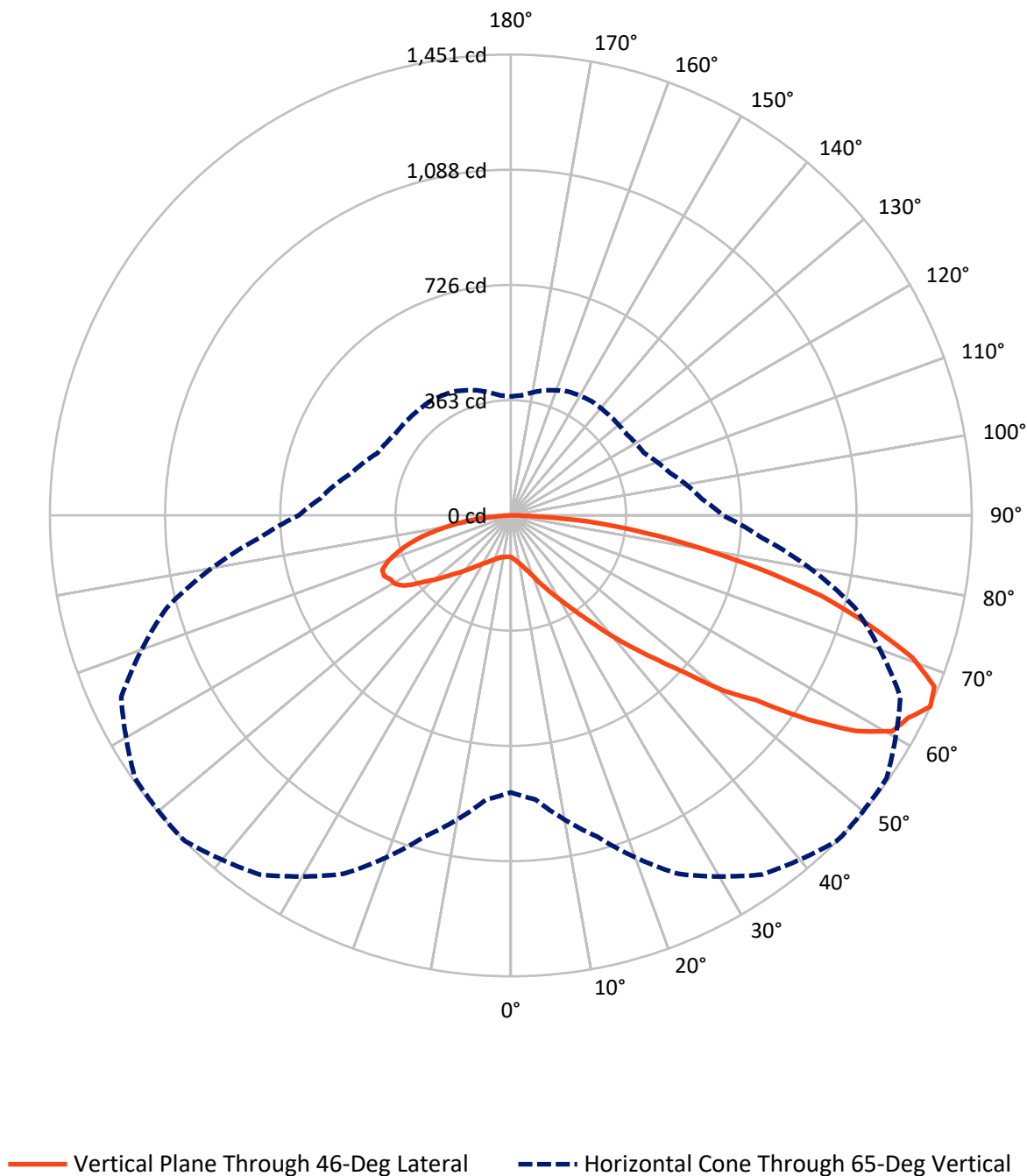


Based on 10 foot mounting height. Maximum calculated value = 2.3 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P198159

CATALOG NUMBER: TT-C1-LED-E1-DL-LWR-LW-7050

Luminous Intensity Polar Plot



REPORT NUMBER: P198159

CATALOG NUMBER: TT-C1-LED-E1-DL-LWR-LW-7050

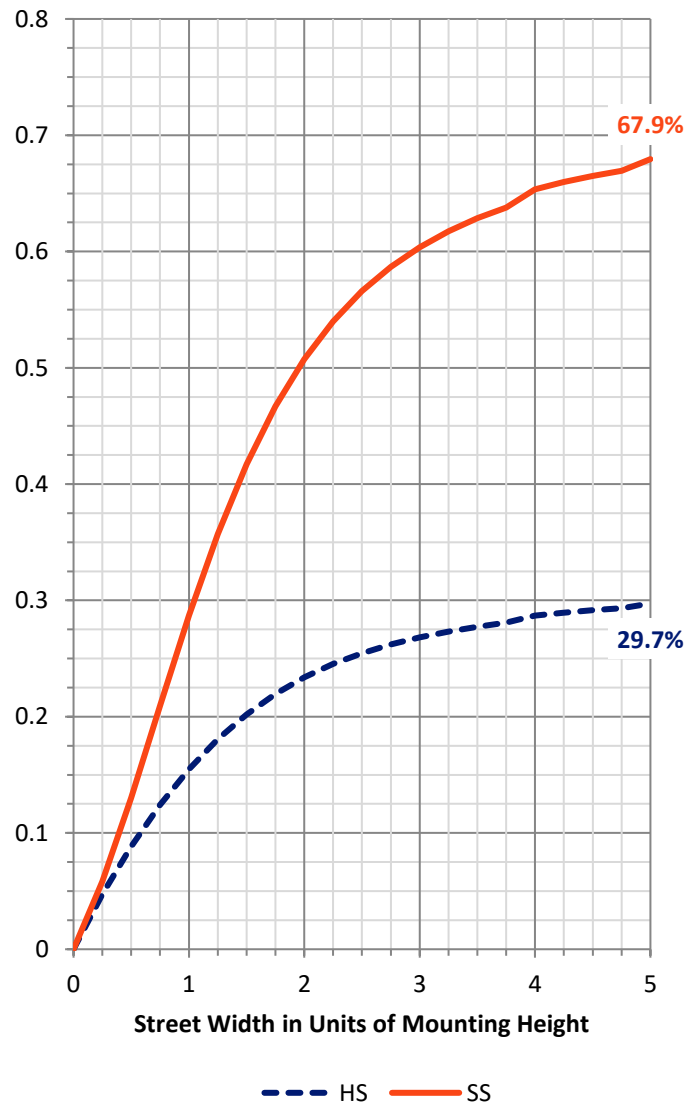
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	873.7	0.0	873.7
	% Fixture	30.4	0.0	30.4
Street Side	Lumens	2003.5	0.0	2003.5
	% Fixture	69.6	0.0	69.6
Total	Lumens	2877.3	0.0	2877.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.2	0.5
10°-20°	45.1	1.6
20°-30°	95.2	3.3
30°-40°	181.0	6.3
40°-50°	334.3	11.6
50°-60°	585.9	20.4
60°-70°	795.0	27.6
70°-80°	646.4	22.5
80°-90°	181.1	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°	2877.3	100.0
0°-180°	2877.3	100.0

Coefficient of Utilization



REPORT NUMBER: P198159

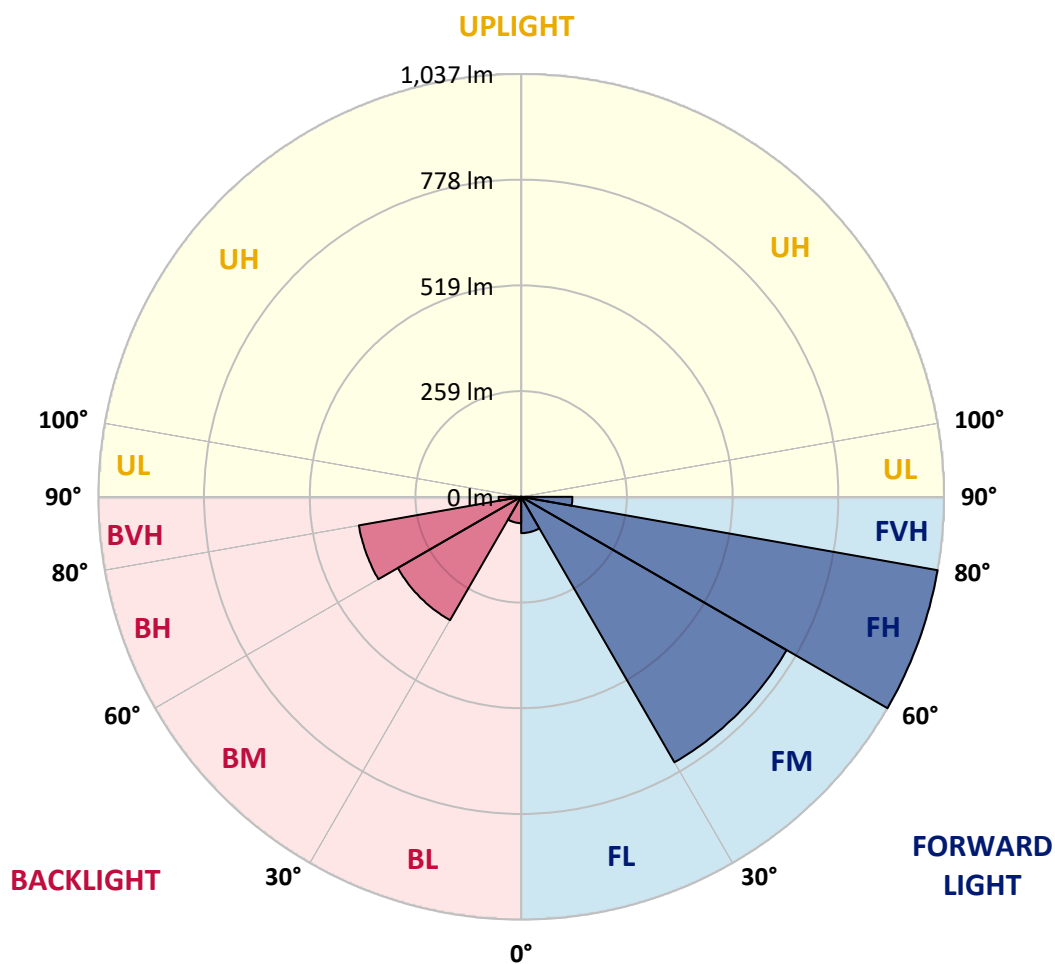
CATALOG NUMBER: TT-C1-LED-E1-DL-LWR-LW-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	89.0	3.1			
FM	(30°-60°)	751.7	26.1			
FH	(60°-80°)	1037.1	36.0			G1/1800
FVH	(80°-90°)	125.7	4.4			G2/225
BL	(0°-30°)	64.5	2.2	B0/110		
BM	(30°-60°)	349.4	12.1	B1/1000		
BH	(60°-80°)	404.4	14.1	B1/500		G1/500
BVH	(80°-90°)	55.4	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



REPORT NUMBER: P198159

CATALOG NUMBER: TT-C1-LED-E1-DL-LWR-LW-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0
2.5°	136.2	136.8	136.8	136.8	136.2	135.6	135.6	135.0	134.5	134.5	133.9
5°	142.6	142.6	142.6	142.0	141.4	140.9	140.3	139.7	138.0	136.8	136.2
7.5°	150.2	150.2	150.2	149.6	148.4	146.7	147.3	145.5	143.8	141.4	139.1
10°	158.9	159.5	160.1	158.3	157.2	155.4	154.8	152.5	150.2	147.3	144.4
12.5°	169.4	168.8	170.0	168.2	167.1	164.1	163.6	160.7	156.6	153.1	149.6
15°	182.2	182.8	182.2	181.0	178.7	175.8	175.8	171.7	167.1	161.8	156.0
17.5°	200.2	200.2	197.9	197.3	193.2	189.8	188.6	185.1	177.5	171.1	164.1
20°	220.0	218.9	215.9	216.5	213.0	207.8	206.6	200.8	192.7	182.8	173.5
22.5°	242.7	241.6	238.1	237.5	232.8	228.8	228.8	220.6	209.5	196.7	183.9
25°	260.8	261.3	261.9	262.5	259.0	252.6	252.0	243.3	228.8	212.5	195.6
27.5°	282.9	285.8	285.2	288.1	286.4	280.6	279.4	270.1	252.0	232.8	211.9
30°	307.9	312.0	309.7	315.5	315.5	311.4	309.1	299.8	281.7	254.4	229.3
32.5°	335.9	336.4	339.9	347.5	351.0	348.7	346.9	338.2	314.9	284.6	252.0
35°	367.9	365.0	370.8	385.3	390.6	391.2	390.6	380.1	359.1	321.9	280.6
37.5°	399.9	398.7	409.8	424.3	440.0	446.4	443.5	440.0	409.8	363.2	310.2
40°	430.2	435.4	449.9	468.0	493.0	508.1	508.7	501.7	470.3	413.9	345.7
42.5°	459.8	470.3	488.9	520.4	552.4	576.8	573.9	568.1	540.7	473.2	391.2
45°	500.6	511.1	529.7	567.5	618.7	649.0	649.6	660.1	636.8	553.0	452.9
47.5°	537.8	547.1	574.5	625.1	688.0	743.3	741.0	756.1	726.4	626.3	501.2
50°	589.1	586.1	626.3	696.7	782.3	852.2	867.3	874.9	819.0	718.3	553.0
52.5°	634.5	631.5	681.6	775.9	882.4	972.6	964.5	983.1	959.8	842.8	663.6
55°	679.9	679.9	742.7	866.7	1007.0	1125.1	1132.1	1163.6	1100.7	936.0	702.6
57.5°	729.9	735.2	824.2	979.0	1150.8	1280.0	1281.1	1284.0	1182.8	973.2	713.0
60°	778.2	792.2	908.0	1089.6	1264.3	1370.2	1379.5	1339.3	1214.2	997.1	717.1
62.5°	831.8	845.7	987.8	1181.6	1348.1	1406.9	1404.0	1364.4	1266.0	1064.0	768.9
65°	871.9	898.1	1046.6	1245.0	1380.1	1449.9	1451.1	1444.1	1353.3	1121.1	790.5
67.5°	912.7	952.3	1076.8	1269.5	1402.8	1439.5	1437.7	1410.9	1317.8	1089.1	747.4
70°	956.3	985.4	1097.8	1247.4	1334.7	1339.3	1341.1	1302.7	1227.0	1023.3	693.2
72.5°	971.5	992.4	1065.8	1155.4	1196.2	1195.0	1178.7	1164.1	1100.1	922.6	615.8
75°	944.7	946.4	957.5	996.5	1015.1	999.4	1008.1	986.6	949.9	792.8	525.0
77.5°	839.9	837.0	805.6	791.6	792.2	788.7	789.3	763.1	747.4	653.1	426.1
80°	655.4	654.8	629.8	590.8	578.6	575.1	578.6	565.8	551.2	493.0	324.2
82.5°	454.6	447.6	436.6	405.7	404.0	397.0	398.7	396.4	389.4	350.4	229.9
85°	220.6	229.9	239.8	237.5	229.9	231.1	238.6	238.1	229.9	200.8	133.9
87.5°	30.3	43.7	45.4	43.7	55.3	69.3	55.3	56.5	45.4	46.6	29.7
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: P198159

CATALOG NUMBER: TT-C1-LED-E1-DL-LWR-LW-7050

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0
2.5°	133.3	132.7	132.1	131.5	131.0	130.4	129.8	129.8	129.2	129.2	129.2
5°	135.6	135.0	133.9	132.7	132.1	131.0	130.4	129.8	128.6	128.6	128.1
7.5°	138.0	137.4	135.6	133.9	132.7	131.5	131.0	130.4	129.8	128.6	128.6
10°	142.6	140.9	138.5	136.2	133.9	132.7	131.5	131.0	131.0	130.4	130.4
12.5°	147.3	145.5	141.4	138.5	135.6	133.9	132.7	132.7	132.1	132.1	131.5
15°	153.1	150.8	146.1	142.0	138.5	136.8	135.0	135.0	135.0	135.0	135.0
17.5°	160.1	156.6	151.3	146.7	143.2	140.9	139.1	139.1	138.5	139.1	139.7
20°	169.4	164.7	157.7	151.9	147.8	146.1	144.9	144.4	144.4	144.9	145.5
22.5°	178.1	172.9	163.6	157.7	154.2	151.3	150.8	150.8	150.2	151.3	151.3
25°	188.6	182.2	172.3	164.7	160.1	157.7	157.7	157.7	158.3	158.9	157.7
27.5°	202.6	195.0	181.6	172.3	168.2	165.9	164.7	165.9	166.5	167.1	165.9
30°	216.5	208.4	191.5	181.0	175.2	172.9	172.9	174.0	174.6	175.2	174.0
32.5°	235.7	223.5	205.5	192.1	185.7	183.4	183.4	183.9	183.9	185.1	184.5
35°	262.5	245.6	222.9	207.2	197.9	194.4	193.8	194.4	195.6	195.0	197.3
37.5°	288.1	268.9	240.4	223.5	214.2	209.0	206.6	206.1	207.2	207.8	208.4
40°	318.4	295.1	261.9	241.0	229.3	223.5	220.0	220.0	219.4	220.0	217.7
42.5°	357.4	331.2	289.3	262.5	246.2	241.0	234.6	232.8	231.1	231.7	228.2
45°	410.4	377.2	327.1	291.6	270.1	259.0	252.6	247.4	245.1	243.9	240.4
47.5°	447.0	411.5	357.4	319.0	296.3	281.7	271.8	264.8	259.0	256.1	256.7
50°	495.9	449.9	394.1	347.5	324.2	307.9	296.3	284.1	275.3	271.8	273.6
52.5°	588.5	533.2	446.4	391.7	352.7	334.7	322.5	307.3	294.5	288.1	289.9
55°	619.3	562.9	483.1	427.2	392.3	370.2	351.0	332.9	316.1	305.6	306.2
57.5°	622.2	566.4	489.5	443.0	419.1	404.0	385.9	362.0	338.8	324.2	323.0
60°	619.3	562.3	488.4	441.2	424.3	423.7	412.7	391.7	364.4	342.8	341.1
62.5°	660.1	599.0	509.3	451.1	427.2	429.0	431.3	416.8	388.8	362.6	356.8
65°	667.6	603.0	518.0	463.3	445.3	441.8	440.0	430.2	407.4	378.9	374.3
67.5°	630.4	569.3	491.8	444.7	432.5	440.0	446.4	437.7	416.2	394.6	388.2
70°	580.9	525.6	453.4	409.8	402.8	414.4	428.4	431.3	419.1	401.6	399.3
72.5°	514.6	468.0	404.5	369.6	366.7	375.4	391.7	405.1	403.4	399.3	398.1
75°	438.3	402.2	346.9	320.1	320.1	331.2	343.4	358.0	369.0	376.0	377.8
77.5°	360.9	324.8	284.1	261.3	264.3	278.8	287.5	302.1	314.3	323.6	324.2
80°	271.2	251.5	215.9	203.7	204.9	214.8	227.0	235.7	245.6	253.8	251.5
82.5°	196.2	178.1	153.7	146.7	151.3	156.0	165.9	173.5	176.4	178.7	183.4
85°	112.9	107.7	94.3	90.2	91.4	96.0	101.9	103.6	106.5	105.4	107.7
87.5°	27.4	29.1	27.4	26.8	27.4	26.2	25.0	30.3	30.8	31.4	30.3
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)