

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: P198197

Luminaire Tested: **TT-C2-LED-E1-DL-CG-LWR-LW-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198197  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34709)  
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-CG-LWR-LW-8030  
Description: TOPTIER LED PARKING GARAGE LUMINAIRE  
DRIVE LANE DISTRIBUTION WITH CLEAR GLASS LENS AND LumaWatt WIRELESS SENSOR  
Light Source: (160) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

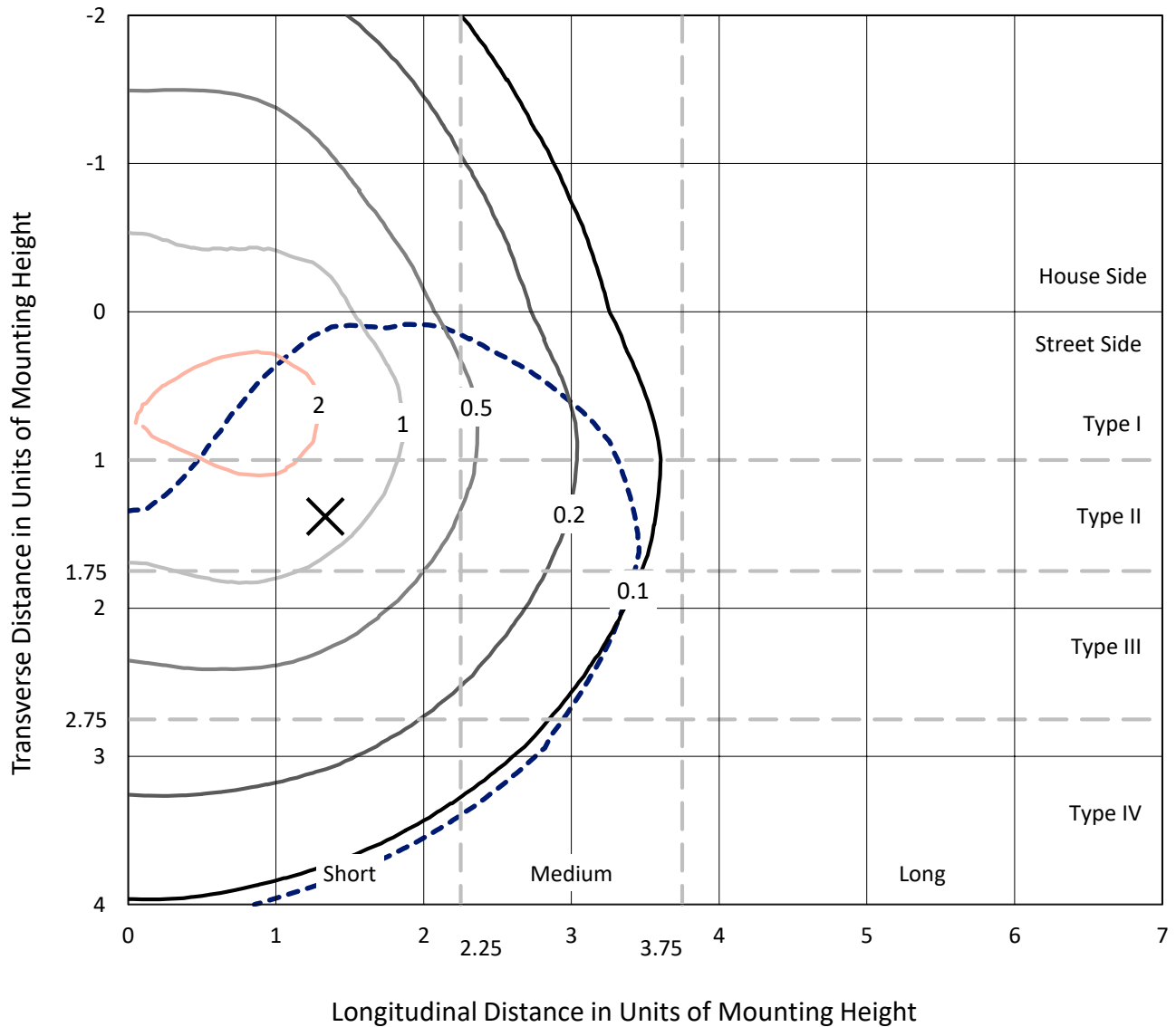
Lumens per Lamp: N/A  
Luminaire Lumens: 2534.4 lumens  
Efficiency: N/A  
Efficacy: 61.2 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 41.4  
Input Voltage (V): NR  
Input Current (A<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

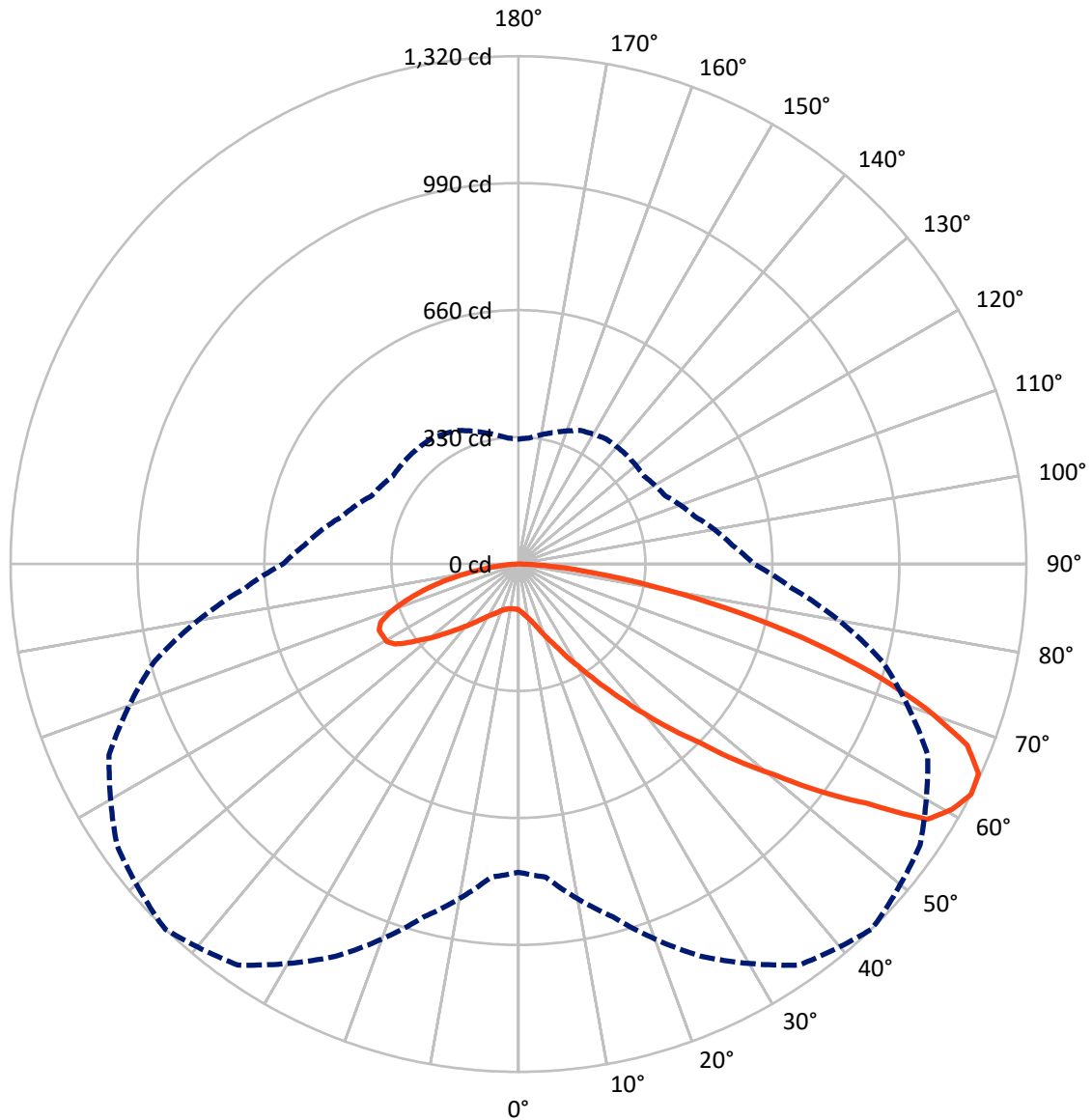
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.4 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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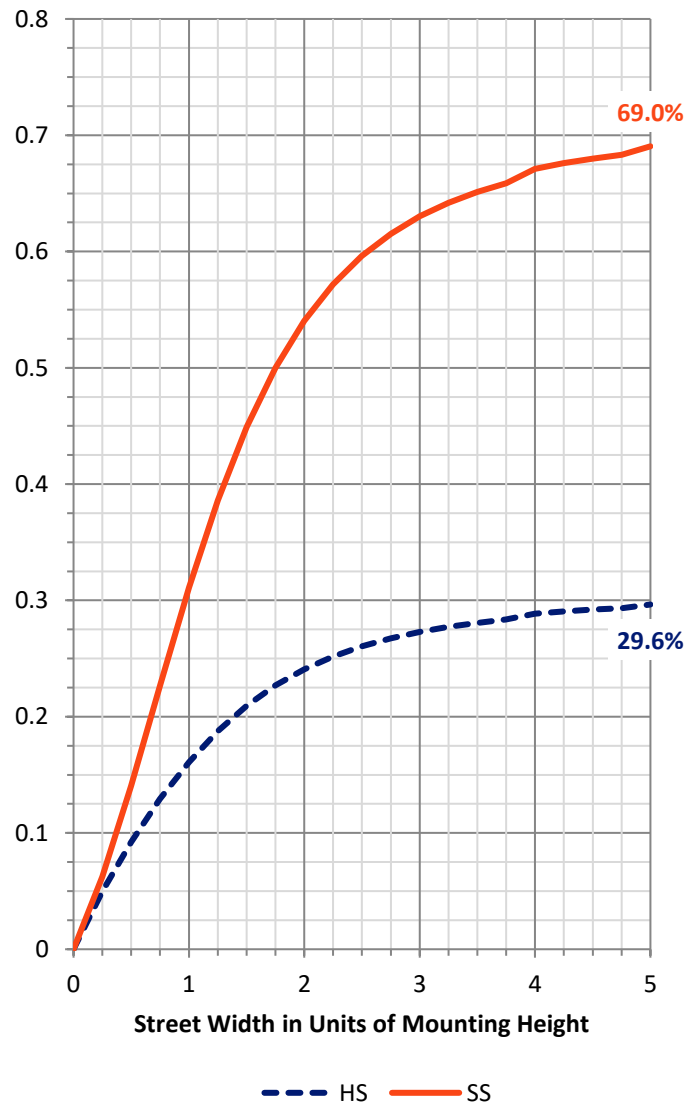
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	761.0	0.0	761.0
	% Fixture	30.0	0.0	30.0
<b>Street Side</b>	Lumens	1773.4	0.0	1773.4
	% Fixture	70.0	0.0	70.0
<b>Total</b>	Lumens	2534.4	0.0	2534.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	12.0	0.5
10°-20°	41.3	1.6
20°-30°	89.3	3.5
30°-40°	176.2	7.0
40°-50°	333.2	13.1
50°-60°	572.7	22.6
60°-70°	718.6	28.4
70°-80°	490.7	19.4
80°-90°	100.4	4.0
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°	2534.4	100.0
0°-180°	2534.4	100.0



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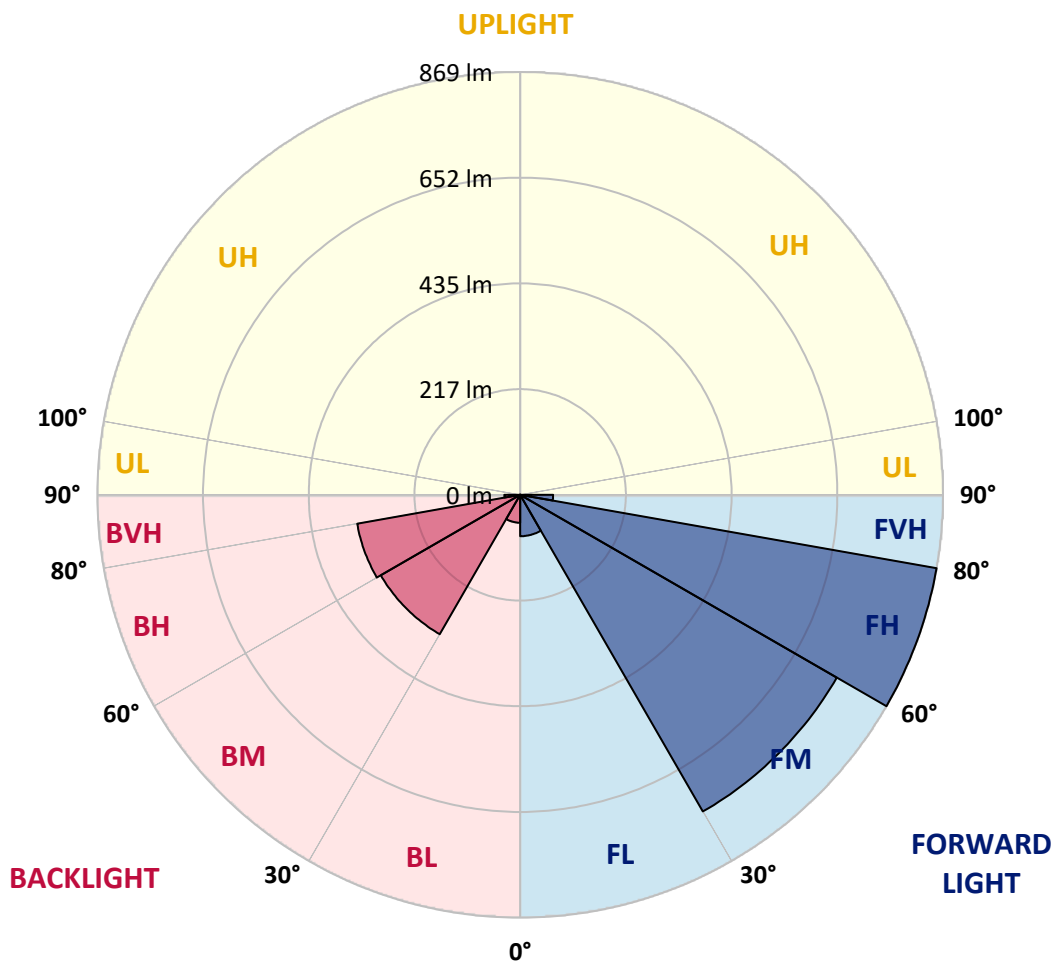
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	85.1	3.4			
FM (30°-60°)	751.4	29.6			
FH (60°-80°)	869.1	34.3			G1/1800
FVH (80°-90°)	67.8	2.7			G1/100
BL (0°-30°)	57.5	2.3	B0/110		
BM (30°-60°)	330.7	13.0	B1/1000		
BH (60°-80°)	340.2	13.4	B1/500		G1/500
BVH (80°-90°)	32.6	1.3			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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	119.0	119.0	119.0	119.0	119.0	119.0	119.0	119.0	119.0	119.0	119.0
2.5°	124.9	124.9	124.9	124.9	123.8	123.8	123.8	123.3	122.7	121.7	121.1
5°	131.3	131.8	131.3	130.7	129.7	129.1	128.6	128.1	126.5	124.9	123.3
7.5°	139.3	138.7	138.7	138.2	136.6	135.5	135.5	133.4	131.3	129.1	126.5
10°	147.8	148.3	148.3	146.7	145.7	143.5	143.5	140.3	137.7	134.5	131.3
12.5°	158.5	157.9	159.0	157.9	156.3	152.6	152.6	149.9	145.1	140.9	136.6
15°	171.8	171.8	172.3	170.2	168.6	164.9	165.9	159.0	154.7	149.9	143.0
17.5°	188.9	188.9	187.3	186.2	183.5	181.4	179.3	173.4	167.0	159.0	151.0
20°	208.1	208.6	206.0	206.0	202.8	200.1	198.5	191.5	181.9	171.3	161.1
22.5°	231.6	230.5	228.4	226.2	224.6	219.8	221.4	212.4	199.6	185.1	171.8
25°	250.2	251.8	251.8	253.4	250.8	245.4	247.0	235.8	220.9	203.8	185.1
27.5°	273.2	276.4	279.1	282.3	281.2	277.5	276.4	266.2	247.0	226.8	201.7
30°	298.3	303.1	305.2	311.1	312.7	309.5	308.9	298.8	280.1	249.7	222.5
32.5°	330.8	330.3	336.7	346.8	353.2	351.6	351.1	339.9	314.8	282.8	245.4
35°	362.3	363.4	370.8	386.3	396.4	399.6	399.1	387.4	362.3	322.3	275.8
37.5°	396.4	398.0	412.4	431.1	447.7	455.7	455.7	450.3	416.7	362.8	309.5
40°	430.0	437.5	454.1	478.1	505.8	519.2	518.6	510.1	479.1	418.8	344.7
42.5°	470.6	478.1	496.2	530.4	565.0	590.6	590.6	588.0	549.0	484.5	395.9
45°	510.6	517.0	539.4	582.6	633.3	663.2	666.9	676.6	649.3	558.6	455.1
47.5°	553.3	558.6	587.4	641.9	705.4	763.5	767.3	774.7	731.0	631.2	501.5
50°	596.0	598.1	640.3	713.4	803.5	859.0	871.3	886.2	825.4	718.7	553.8
52.5°	645.1	646.1	695.2	788.6	901.2	982.3	984.4	995.1	961.5	825.9	651.5
55°	688.3	689.9	752.9	872.9	1019.6	1097.5	1118.9	1149.8	1067.7	898.0	680.3
57.5°	728.3	734.7	821.1	974.8	1134.3	1252.3	1248.5	1246.9	1130.1	926.8	686.2
60°	767.3	779.0	889.4	1057.5	1218.6	1294.9	1299.2	1268.8	1146.6	938.5	680.3
62.5°	800.9	816.9	949.2	1125.3	1272.5	1320.0	1317.4	1274.1	1173.8	979.6	712.3
65°	824.9	846.8	976.4	1154.1	1268.3	1314.2	1317.9	1294.9	1197.3	981.7	702.7
67.5°	837.2	868.1	975.9	1134.9	1236.3	1258.1	1259.7	1217.6	1125.3	929.5	642.9
70°	840.4	860.6	949.7	1064.4	1125.3	1123.1	1120.5	1089.0	1000.4	829.2	571.4
72.5°	805.7	823.8	867.0	937.5	962.0	956.7	946.5	911.3	851.6	712.8	487.1
75°	729.4	735.8	737.4	757.1	758.2	759.8	748.0	725.1	683.0	576.2	389.0
77.5°	587.4	597.1	576.2	553.8	553.3	551.2	548.5	519.7	499.4	432.2	289.2
80°	427.9	423.6	406.6	381.0	363.9	358.6	355.4	347.3	335.1	296.1	201.2
82.5°	258.2	263.0	245.4	227.3	218.2	209.2	214.0	205.4	199.0	180.9	123.3
85°	115.8	115.8	112.0	107.2	99.8	100.3	101.4	98.2	93.9	84.8	59.2
87.5°	22.4	20.3	21.9	22.4	20.8	21.3	22.9	24.0	25.1	23.5	17.6
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°	119.0	119.0	119.0	119.0	119.0	119.0	119.0	119.0	119.0	119.0	119.0
2.5°	121.1	120.6	120.1	119.0	117.9	117.4	116.8	116.3	116.3	115.8	115.8
5°	122.7	122.2	121.1	120.1	119.0	117.4	116.3	115.8	114.7	114.7	114.7
7.5°	125.4	124.3	122.2	120.6	119.0	117.4	116.3	115.2	114.7	113.6	113.6
10°	129.1	127.5	124.9	121.7	119.5	117.9	116.3	115.2	114.7	114.2	114.2
12.5°	134.5	131.8	127.5	124.3	121.1	119.0	117.4	116.3	115.8	115.2	115.2
15°	139.8	137.1	131.8	127.0	123.3	121.1	119.0	118.5	117.4	117.4	117.4
17.5°	147.3	143.0	136.6	131.3	127.0	123.8	122.2	120.6	120.6	121.1	121.1
20°	155.8	151.0	143.0	136.1	131.3	128.1	126.5	125.4	124.9	125.4	125.9
22.5°	165.9	159.0	148.9	142.5	137.1	133.4	131.8	130.7	130.2	131.3	130.7
25°	176.1	169.1	157.4	148.9	142.5	139.8	138.2	137.7	136.6	137.7	137.1
27.5°	193.1	183.5	167.5	156.3	150.5	147.3	145.1	144.1	144.1	144.1	143.5
30°	208.1	196.9	178.2	167.0	158.5	154.7	152.6	152.1	152.1	152.6	152.1
32.5°	228.9	215.0	193.1	178.2	170.2	164.3	162.2	161.7	161.7	161.1	161.7
35°	255.6	239.0	210.2	192.6	181.9	176.6	174.5	173.9	172.3	172.3	172.3
37.5°	284.4	262.5	230.5	211.3	198.0	191.0	187.8	185.7	184.6	183.5	183.5
40°	315.9	290.8	255.0	230.0	216.1	207.0	201.2	198.0	196.3	194.7	193.7
42.5°	357.0	329.2	283.3	252.9	235.3	225.2	216.6	213.4	209.2	207.6	204.4
45°	410.8	375.6	318.5	284.4	258.8	244.4	235.8	228.9	223.6	220.9	218.2
47.5°	453.0	411.4	352.7	311.6	286.5	267.8	256.1	244.9	238.5	233.7	232.6
50°	495.7	451.9	389.0	339.9	312.1	295.6	280.1	266.2	254.5	249.2	250.2
52.5°	578.4	525.6	437.5	378.3	339.3	320.7	304.7	287.6	274.2	265.7	266.2
55°	601.9	548.0	469.0	415.6	378.3	353.7	332.4	313.7	294.5	282.3	282.8
57.5°	600.3	546.9	471.7	425.8	401.2	383.6	363.9	338.3	315.9	299.9	297.7
60°	592.3	538.4	466.9	420.4	402.3	398.0	387.9	364.4	334.0	315.9	312.1
62.5°	612.0	558.6	475.4	420.4	398.6	399.1	397.0	382.6	353.7	328.7	324.4
65°	603.5	545.8	470.1	424.2	405.5	401.2	400.2	386.3	366.6	338.3	334.5
67.5°	552.8	502.6	433.8	393.2	385.2	389.0	394.3	385.2	365.5	344.1	339.3
70°	485.0	442.3	384.2	348.9	345.2	352.7	365.0	366.0	354.8	338.3	338.8
72.5°	409.2	375.1	326.0	302.0	297.7	304.7	320.1	327.6	328.1	322.3	321.7
75°	328.7	297.7	262.5	242.2	243.3	254.0	265.7	278.5	282.8	286.5	289.7
77.5°	244.9	228.4	198.5	185.1	187.8	199.6	207.0	215.0	224.1	228.4	231.6
80°	171.3	156.9	137.1	129.1	132.3	139.3	145.7	152.6	164.3	164.9	171.3
82.5°	107.2	97.6	87.5	84.8	85.4	88.0	95.5	99.8	105.1	106.7	105.6
85°	52.3	50.2	47.0	45.4	45.9	48.6	53.4	56.6	59.8	59.2	56.0
87.5°	16.5	17.1	17.6	18.1	18.1	19.7	21.3	21.3	22.4	21.9	21.9
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)