

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: P198221

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198221
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34707)
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-8030
Description: TOPTIER LED PARKING GARAGE LUMINAIRE
DRIVE LANE DISTRIBUTION WITH CLEAR GLASS LENS
Light Source: (160) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2838.4 lumens
Efficiency: N/A
Efficacy: 68.6 lumens/watt
Luminous Opening: Circular (Dia: 1.12' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

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

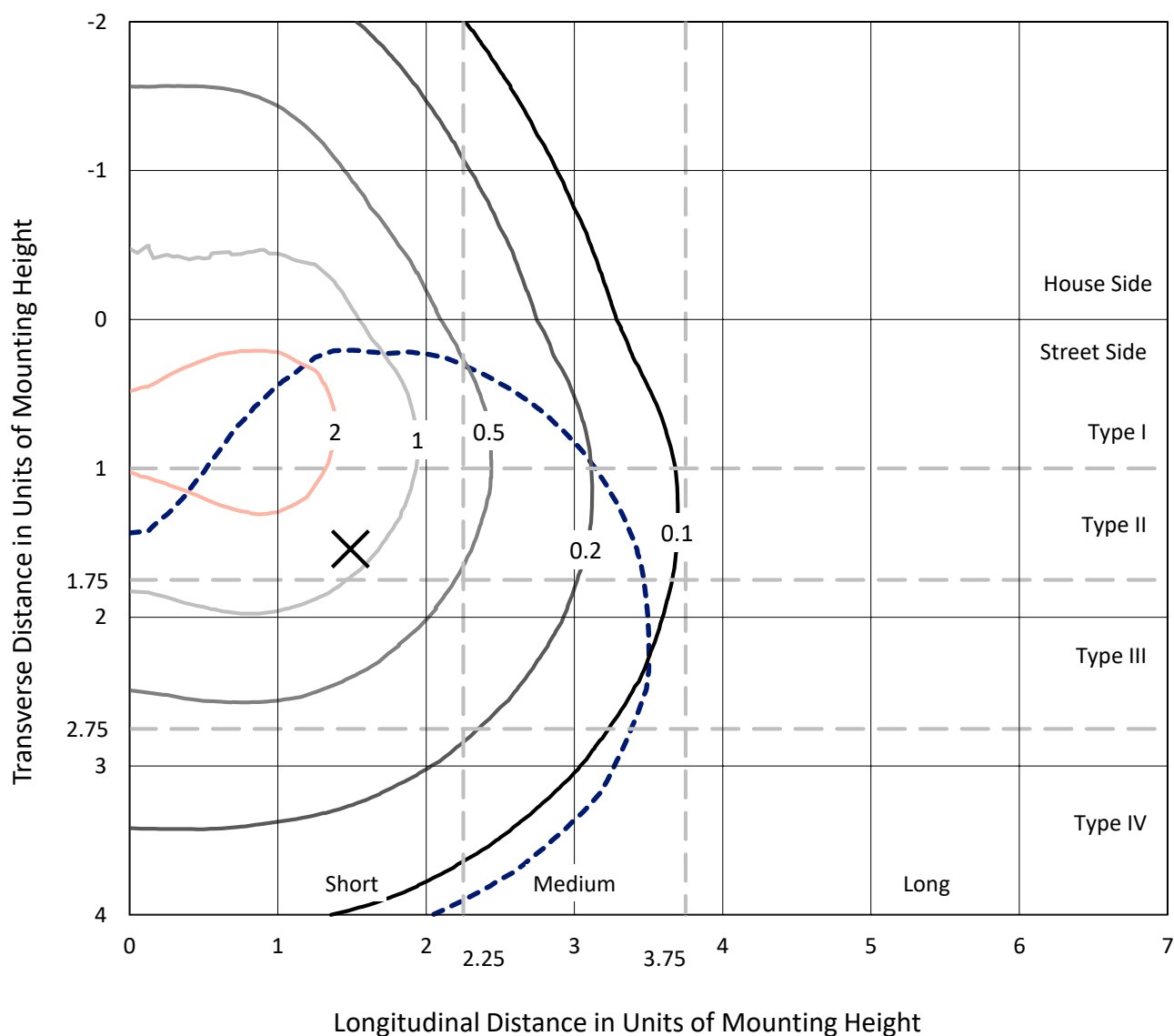


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

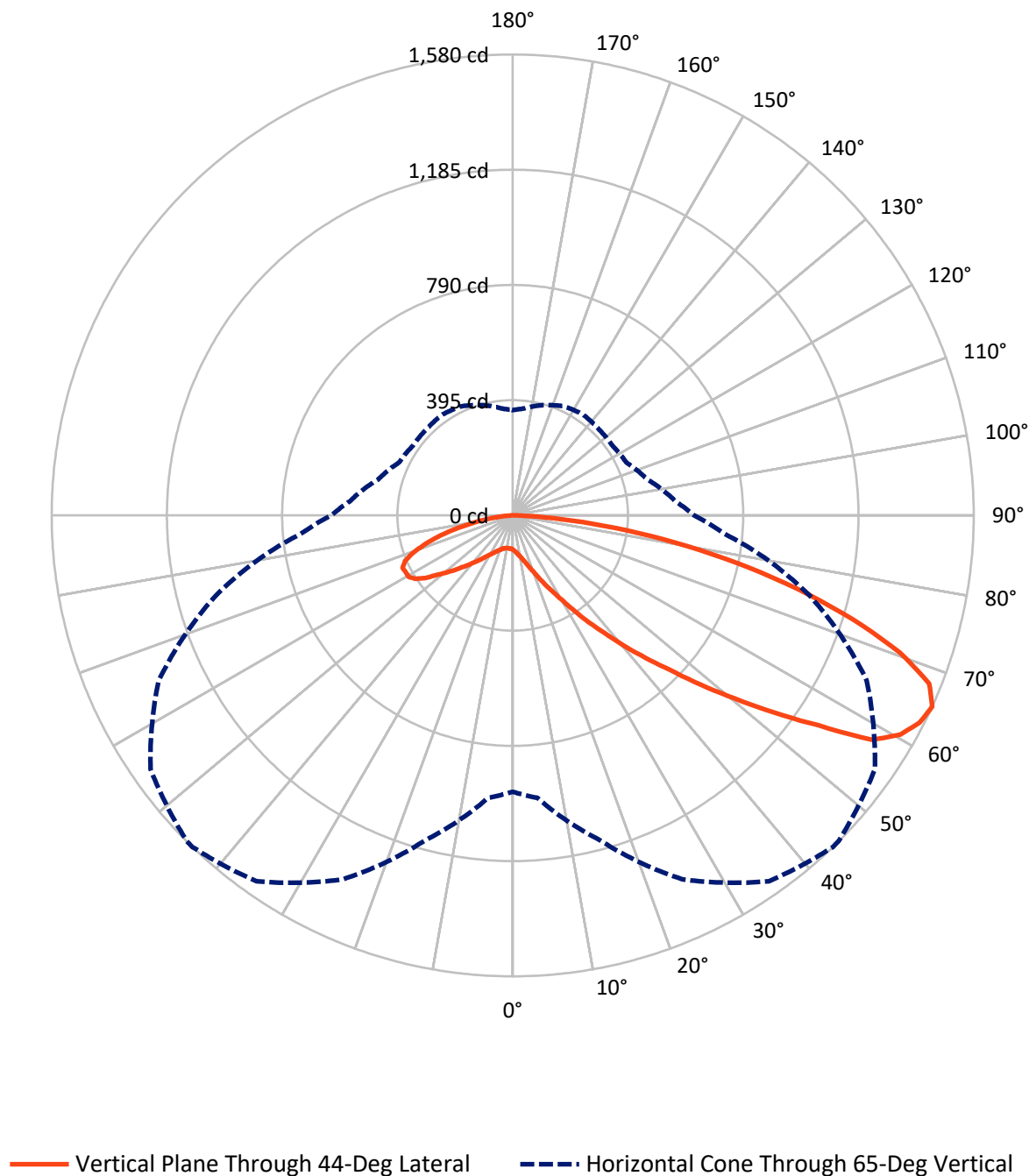


Based on 10 foot mounting height. Maximum calculated value = 2.7 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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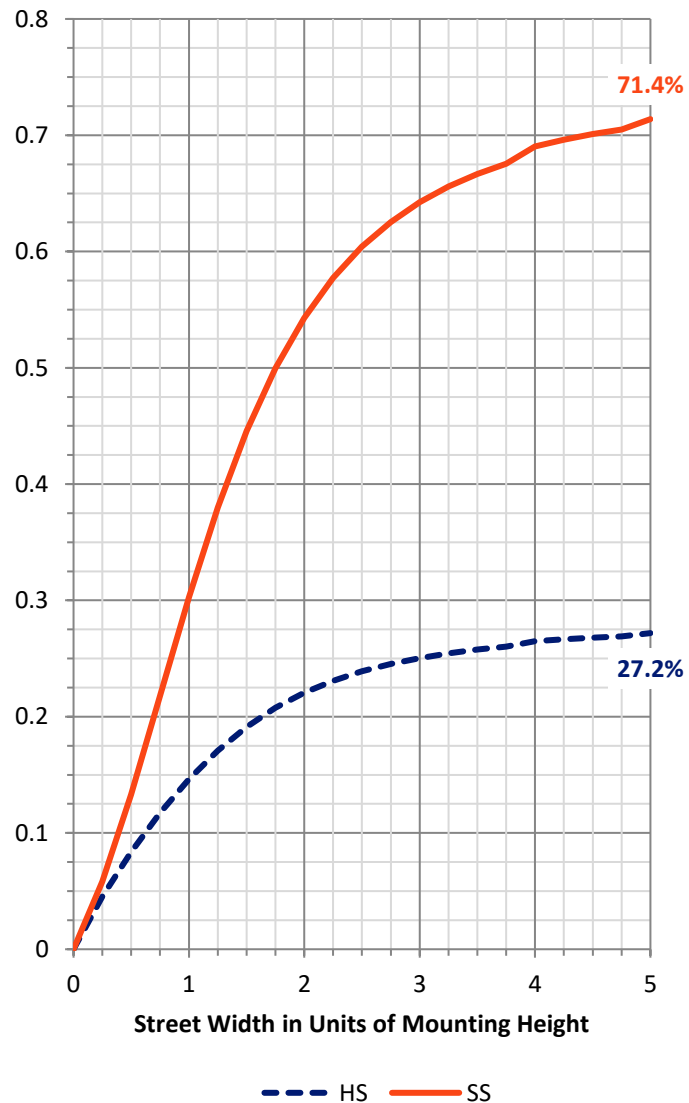
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	778.4	0.0	778.4
	% Fixture	27.4	0.0	27.4
Street Side	Lumens	2060.0	0.0	2060.0
	% Fixture	72.6	0.0	72.6
Total	Lumens	2838.4	0.0	2838.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.8	0.4
10°-20°	41.3	1.5
20°-30°	92.6	3.3
30°-40°	189.0	6.7
40°-50°	363.4	12.8
50°-60°	631.2	22.2
60°-70°	808.4	28.5
70°-80°	578.9	20.4
80°-90°	121.8	4.3
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°	2838.4	100.0
0°-180°	2838.4	100.0

Coefficient of Utilization



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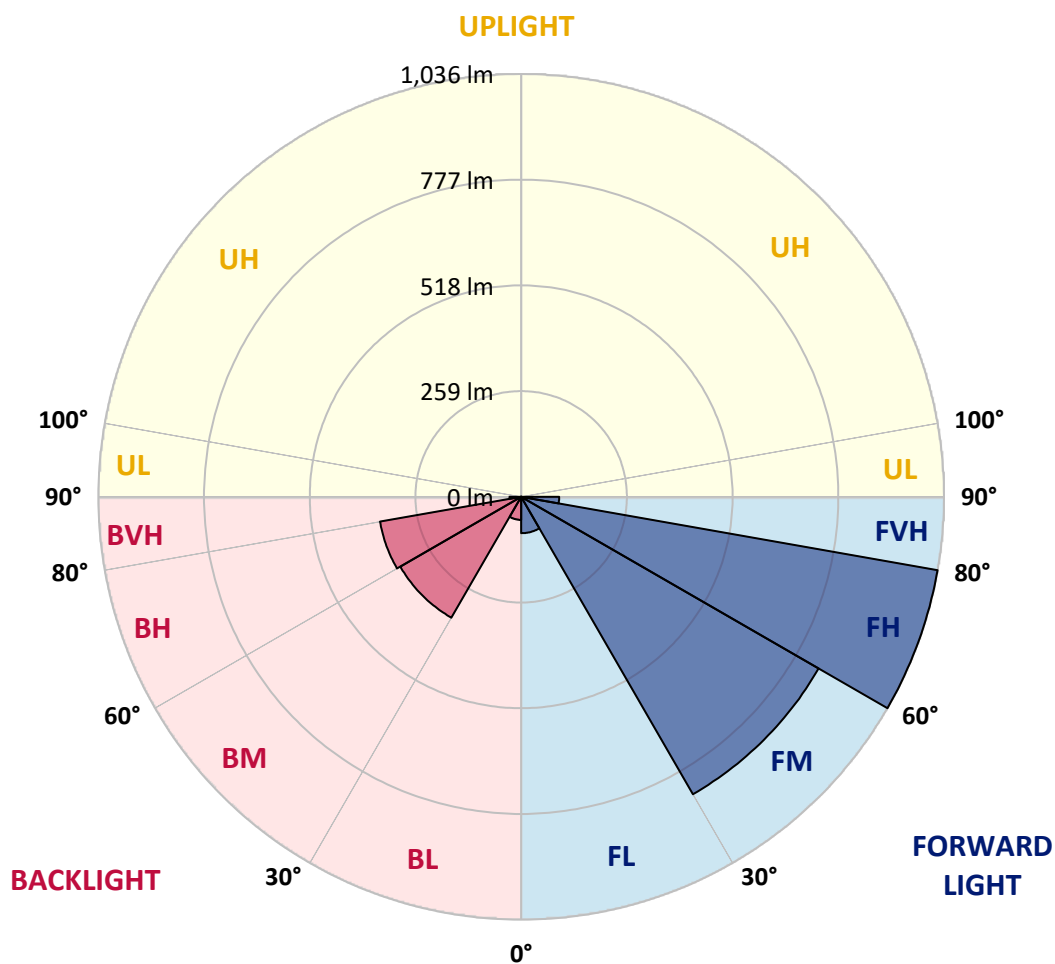
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	89.2	3.1			
FM	(30°-60°)	841.6	29.7			
FH	(60°-80°)	1036.1	36.5			G1/1800
FVH	(80°-90°)	93.1	3.3			G1/100
BL	(0°-30°)	56.5	2.0	B0/110		
BM	(30°-60°)	342.0	12.0	B1/1000		
BH	(60°-80°)	351.2	12.4	B1/500		G1/500
BVH	(80°-90°)	28.7	1.0			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°	116.8	116.8	116.8	116.8	116.8	116.8	116.8	116.8	116.8	116.8	116.8
2.5°	123.3	123.3	123.3	122.7	122.2	121.7	121.7	121.1	120.6	120.1	119.0
5°	130.7	130.2	130.2	129.1	128.6	127.5	127.5	126.5	124.9	123.3	121.7
7.5°	138.7	139.3	138.7	137.7	136.1	135.0	134.5	132.3	130.2	127.5	124.9
10°	148.3	148.9	148.9	147.8	146.2	143.5	143.5	140.3	137.1	133.9	129.1
12.5°	162.2	161.7	161.1	161.1	157.9	154.7	155.8	151.5	146.2	141.4	135.5
15°	175.0	176.1	177.1	174.5	172.3	169.1	168.6	163.3	157.4	150.5	143.0
17.5°	193.7	194.7	194.2	193.1	190.5	186.7	185.7	179.3	171.3	161.7	151.5
20°	217.7	218.2	216.1	215.0	212.9	208.1	206.5	199.0	188.3	175.0	162.7
22.5°	244.4	242.8	242.2	241.2	240.6	235.3	234.8	223.6	208.1	193.1	175.5
25°	267.3	268.9	270.0	271.6	271.0	265.7	265.7	252.9	234.2	214.0	191.5
27.5°	294.0	296.7	299.9	303.6	303.1	299.3	301.5	289.2	264.1	239.6	210.8
30°	322.8	327.1	332.4	341.5	344.1	340.4	340.4	324.9	300.4	267.3	232.1
32.5°	361.2	363.4	368.2	382.6	390.6	390.6	390.0	373.0	343.1	301.5	257.7
35°	401.2	401.8	414.6	432.2	442.3	450.3	446.6	430.0	396.4	345.2	290.3
37.5°	442.3	442.9	461.0	481.8	504.7	511.1	514.4	499.4	456.2	393.8	326.0
40°	483.4	490.3	511.7	540.5	574.6	587.4	585.8	572.5	520.8	447.1	365.0
42.5°	525.0	539.4	561.3	605.6	646.1	666.9	668.0	656.3	601.9	517.0	415.6
45°	574.6	583.7	617.3	668.5	726.7	753.9	756.6	751.3	700.0	602.4	476.5
47.5°	626.4	634.9	675.5	740.0	812.6	867.6	872.4	867.6	804.1	674.4	530.9
50°	683.0	686.2	734.7	821.1	926.3	986.5	989.8	991.9	906.0	767.3	583.7
52.5°	735.8	736.8	799.3	912.4	1046.8	1122.1	1125.8	1121.5	1053.8	883.6	683.0
55°	788.1	789.1	868.1	1017.0	1176.5	1269.9	1293.3	1295.5	1172.8	958.3	709.6
57.5°	836.6	841.4	949.2	1121.0	1322.7	1451.3	1449.7	1413.9	1242.7	986.5	715.5
60°	880.4	895.8	1026.6	1237.9	1441.1	1526.0	1534.5	1456.1	1267.2	998.8	710.7
62.5°	917.7	934.8	1099.7	1330.7	1515.3	1565.5	1562.3	1473.2	1301.9	1041.5	742.2
65°	947.6	972.1	1152.0	1376.6	1531.3	1580.4	1579.9	1515.8	1338.7	1050.6	729.4
67.5°	964.1	1002.0	1160.0	1377.6	1519.0	1539.9	1532.4	1452.9	1269.9	992.4	667.5
70°	973.2	997.8	1140.7	1316.8	1413.4	1407.5	1409.1	1312.6	1151.4	895.3	593.3
72.5°	940.1	960.4	1060.7	1185.6	1249.1	1219.2	1233.1	1144.5	1001.0	763.5	499.9
75°	858.0	867.6	916.1	995.6	1029.8	1009.5	1009.5	945.5	807.8	626.4	403.9
77.5°	718.2	721.4	740.0	782.7	792.3	786.5	784.9	729.9	620.0	478.6	302.0
80°	513.3	525.0	533.0	551.7	572.0	563.4	552.2	507.9	433.8	327.6	208.1
82.5°	318.5	319.6	327.6	339.9	343.1	354.3	352.7	317.5	262.0	195.8	121.7
85°	148.9	146.2	153.7	162.2	167.0	166.5	170.2	153.1	121.1	89.6	55.5
87.5°	23.5	33.1	35.2	34.7	38.4	38.9	40.6	36.8	25.1	17.6	13.3
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°	116.8	116.8	116.8	116.8	116.8	116.8	116.8	116.8	116.8	116.8	116.8
2.5°	118.5	118.5	117.4	116.3	115.2	114.7	114.2	113.6	113.6	113.1	113.1
5°	121.1	120.1	118.5	116.8	115.2	114.2	113.1	112.6	111.5	111.0	111.0
7.5°	123.3	122.2	119.5	117.4	115.2	113.6	112.0	111.0	110.4	109.9	109.9
10°	127.5	125.4	122.2	118.5	115.8	113.6	112.0	111.0	110.4	109.9	109.9
12.5°	133.4	130.2	124.9	121.1	117.4	114.7	113.1	112.0	111.0	111.0	110.4
15°	139.8	136.1	129.7	123.8	119.5	116.8	114.7	114.2	113.1	113.1	113.1
17.5°	147.3	143.0	135.0	128.1	123.3	120.1	117.9	116.8	116.3	116.8	117.4
20°	156.9	151.0	140.9	133.4	127.5	124.3	122.7	121.1	121.1	122.2	122.2
22.5°	168.1	161.1	148.9	139.8	133.9	129.7	128.6	127.5	127.0	128.1	128.1
25°	179.8	171.8	157.4	147.3	140.3	136.6	135.5	134.5	135.0	135.5	133.9
27.5°	198.0	186.7	168.1	156.3	148.3	144.6	143.0	142.5	143.0	143.5	142.5
30°	215.0	201.7	180.9	167.0	156.9	153.1	151.5	151.5	152.1	152.1	152.1
32.5°	238.5	222.0	195.3	178.7	168.6	163.8	163.3	163.3	162.2	162.7	162.2
35°	266.2	246.5	215.0	194.7	183.0	177.7	176.1	175.0	175.0	175.0	175.0
37.5°	296.1	272.1	235.3	212.9	199.6	193.1	189.9	188.3	188.9	188.9	187.8
40°	329.7	302.0	259.3	231.6	219.3	209.7	206.0	204.4	203.8	202.8	200.1
42.5°	374.6	339.3	288.7	255.6	237.4	230.5	223.6	220.4	217.7	217.2	212.9
45°	427.4	389.5	326.5	289.7	265.7	250.2	243.3	238.0	233.2	231.6	228.4
47.5°	471.1	425.2	360.2	319.1	292.4	276.4	265.2	257.2	250.8	247.0	248.1
50°	520.2	469.0	398.6	346.8	320.7	303.6	292.9	279.6	270.0	264.1	266.2
52.5°	600.8	543.7	451.9	394.8	350.0	332.9	319.1	303.6	290.8	282.8	287.1
55°	623.2	563.4	477.5	425.2	390.6	371.9	351.1	331.9	313.7	303.1	303.1
57.5°	622.1	561.8	479.7	433.8	413.5	400.2	384.7	360.7	337.2	321.7	320.7
60°	614.1	553.8	474.3	427.9	412.4	415.1	408.7	388.4	360.7	339.3	336.1
62.5°	634.9	573.6	488.2	433.8	411.4	414.0	419.4	407.6	380.4	353.7	350.5
65°	621.6	559.7	477.0	429.5	417.2	417.8	421.5	413.0	391.1	366.6	361.2
67.5°	567.2	512.7	439.1	398.0	390.0	399.6	411.4	408.7	390.0	373.5	367.1
70°	498.3	450.3	387.4	353.2	347.3	361.2	381.0	384.7	379.4	368.7	366.6
72.5°	422.0	379.9	326.5	300.9	298.8	309.5	329.2	342.0	345.7	350.5	350.5
75°	338.8	305.7	259.8	242.2	242.2	254.0	270.0	286.5	296.7	309.5	313.2
77.5°	257.2	228.4	195.8	180.9	180.9	191.5	203.8	217.2	234.2	251.8	249.2
80°	176.1	157.4	133.9	126.5	124.9	130.7	141.4	150.5	165.4	177.1	184.1
82.5°	100.8	94.4	80.6	74.2	73.6	81.1	88.6	89.6	99.8	106.7	108.8
85°	48.0	42.2	39.5	35.2	35.7	37.3	40.0	42.2	44.8	47.5	47.5
87.5°	10.7	10.1	9.1	9.6	9.6	8.5	9.6	9.1	10.1	10.7	9.6
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)