

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: P821149

Luminaire Tested: **TT-D3-830-24VDC-DL**

Issue Date: 5/19/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P821149  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1908-473-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TT-D3-830-24VDC-DL  
Description: TOPTIER LED PARKING GARAGE LUMINAIRE  
3000K, 80 CRI LEDS AND DRIVE LANE DISTRIBUTION  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

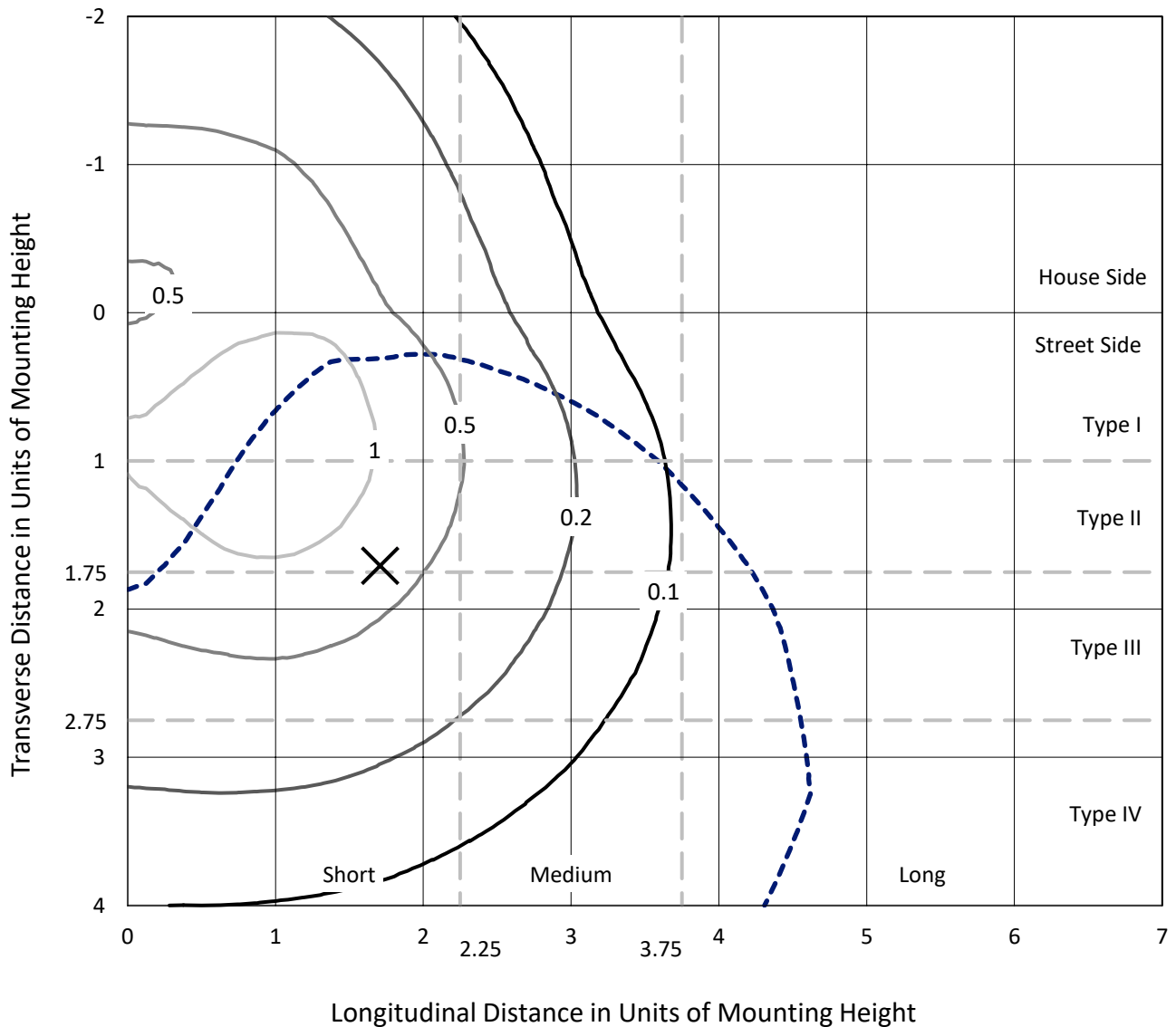
Lumens per Lamp: N/A  
Luminaire Lumens: 4762 lumens  
Efficiency: N/A  
Efficacy: 103.5 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G3

Input Watts (W): 46  
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

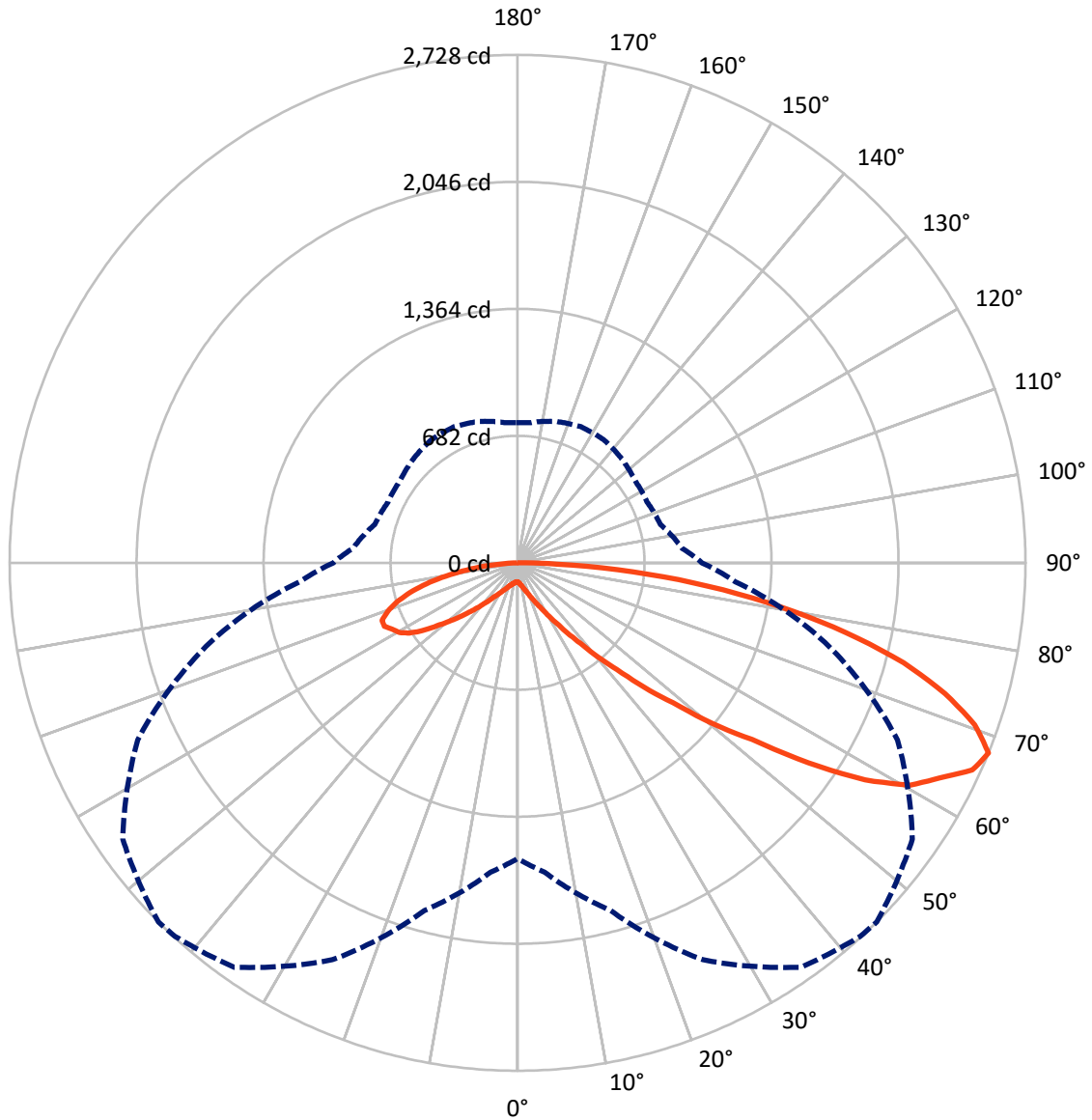
✕ Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 1.6 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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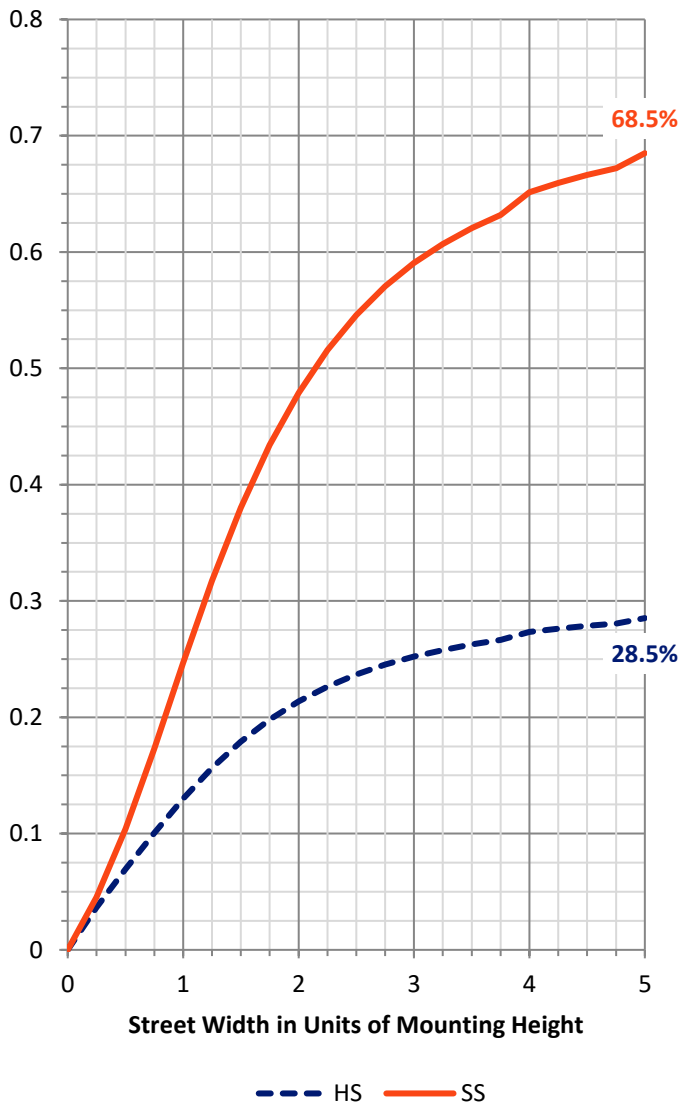
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1387.7	0.0	1387.7
	% Fixture	29.1	0.0	29.1
<b>Street Side</b>	Lumens	3374.3	0.0	3374.3
	% Fixture	70.9	0.0	70.9
<b>Total</b>	Lumens	4762.0	0.0	4762.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	10.6	0.2
10°-20°	39.5	0.8
20°-30°	93.4	2.0
30°-40°	211.4	4.4
40°-50°	471.3	9.9
50°-60°	947.6	19.9
60°-70°	1391.7	29.2
70°-80°	1223.8	25.7
80°-90°	372.6	7.8
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°	4762.0	100.0
0°-180°	4762.0	100.0

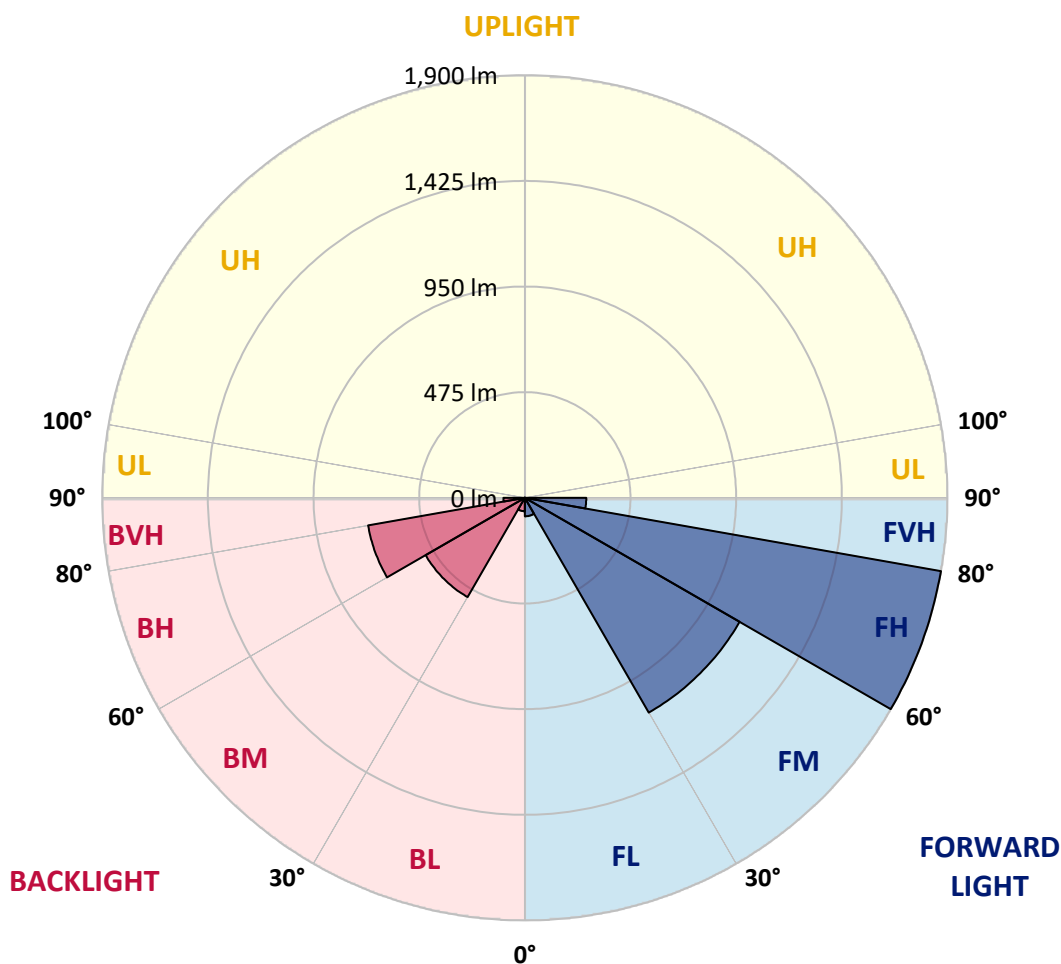


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	83.2	1.7			
FM (30°-60°)	1115.2	23.4			
FH (60°-80°)	1900.0	39.9			G2/5000
FVH (80°-90°)	276.1	5.8			G3/500
BL (0°-30°)	60.4	1.3	B0/110		
BM (30°-60°)	515.2	10.8	B1/1000		
BH (60°-80°)	715.6	15.0	B2/1000		G2/1000
BVH (80°-90°)	96.5	2.0			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	42.5°	45°	55°	65°	75°	85°
0°	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3
2.5°	107.7	106.9	106.9	106.9	106.0	106.0	106.0	106.0	105.1	105.1	105.1
5°	114.0	113.1	114.0	112.2	111.3	111.3	110.4	110.4	109.5	108.6	107.7
7.5°	122.9	122.0	122.0	120.2	119.3	118.4	118.4	116.6	115.8	114.0	112.2
10°	132.7	132.7	131.8	130.9	129.1	127.3	127.3	124.7	123.8	121.1	118.4
12.5°	144.3	144.3	144.3	142.5	140.7	139.8	138.0	136.2	133.6	129.1	126.4
15°	158.5	158.5	158.5	156.7	154.9	153.2	152.3	148.7	144.3	139.8	134.5
17.5°	176.3	174.5	174.5	172.7	171.0	170.1	168.3	164.7	158.5	153.2	146.0
20°	195.9	195.0	194.1	194.1	192.3	190.6	189.7	184.3	177.2	167.4	158.5
22.5°	218.2	217.3	217.3	219.1	218.2	215.5	215.5	207.5	197.7	186.1	172.7
25°	245.8	244.9	246.7	250.2	250.2	248.4	245.8	237.8	223.5	207.5	191.4
27.5°	276.0	275.1	278.7	284.9	286.7	284.1	282.3	273.4	257.3	236.0	212.8
30°	312.5	313.4	323.2	330.4	334.8	333.0	332.1	322.3	296.5	271.6	241.3
32.5°	357.1	354.4	366.9	378.4	386.5	390.9	388.2	376.7	354.4	315.2	276.9
35°	404.3	405.2	420.3	437.2	455.9	457.7	463.0	451.5	421.2	374.9	321.5
37.5°	465.7	458.6	478.2	510.2	532.5	552.1	548.5	541.4	505.8	444.3	371.3
40°	520.9	519.1	546.7	591.3	632.2	660.7	664.3	655.4	608.2	520.9	424.7
42.5°	584.1	589.5	627.8	689.2	751.5	792.5	782.7	778.3	723.0	611.7	497.8
45°	648.2	666.1	715.0	804.1	877.1	935.9	952.8	937.6	870.0	755.1	590.4
47.5°	725.7	749.8	810.3	930.5	1049.8	1118.4	1122.0	1167.4	1065.0	893.1	686.5
50°	828.1	838.8	923.4	1070.3	1234.2	1330.3	1357.9	1358.8	1256.4	1032.0	795.2
52.5°	928.7	936.8	1048.1	1237.7	1460.3	1569.9	1576.1	1610.8	1471.0	1256.4	951.0
55°	1049.8	1046.3	1199.4	1427.4	1690.1	1849.5	1895.8	1943.0	1764.9	1433.6	1040.0
57.5°	1167.4	1162.0	1346.4	1645.6	2004.4	2162.9	2201.2	2167.4	1902.9	1507.5	1083.7
60°	1276.0	1294.7	1519.1	1886.9	2247.5	2398.9	2424.7	2333.0	1991.9	1564.5	1111.3
62.5°	1389.1	1426.5	1698.1	2088.1	2433.6	2542.2	2544.0	2436.3	2140.6	1674.9	1201.2
65°	1495.1	1554.7	1837.0	2260.0	2563.6	2672.2	2684.7	2587.6	2286.7	1771.1	1216.4
67.5°	1588.6	1667.8	1933.2	2352.6	2651.8	2722.1	2728.3	2588.5	2251.9	1731.9	1174.5
70°	1664.3	1728.4	1992.8	2354.3	2590.3	2609.9	2605.5	2456.8	2155.8	1654.5	1104.2
72.5°	1693.6	1746.2	1964.3	2243.9	2409.6	2405.1	2401.5	2264.4	1997.3	1525.3	1002.6
75°	1651.8	1666.9	1808.5	2008.0	2113.0	2138.0	2141.5	2017.8	1752.4	1333.9	860.2
77.5°	1479.0	1471.0	1579.7	1711.4	1790.7	1808.5	1804.9	1701.6	1469.2	1108.6	721.3
80°	1172.7	1189.6	1257.3	1344.6	1423.8	1443.4	1431.0	1352.6	1143.3	864.6	553.9
82.5°	820.1	840.6	897.6	963.5	1023.1	1023.1	1034.7	959.0	810.3	620.6	387.3
85°	442.6	431.0	493.3	568.1	610.8	618.9	623.3	598.4	501.3	374.9	229.7
87.5°	73.0	78.4	97.1	148.7	169.2	195.9	208.4	163.0	98.8	63.2	46.3
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°	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3
2.5°	105.1	104.2	103.3	102.4	102.4	101.5	101.5	101.5	102.4	102.4	102.4
5°	107.7	106.9	106.0	105.1	103.3	103.3	103.3	103.3	103.3	103.3	103.3
7.5°	112.2	110.4	109.5	107.7	106.0	106.0	105.1	105.1	105.1	106.0	105.1
10°	117.5	115.8	114.0	111.3	110.4	109.5	108.6	108.6	109.5	109.5	108.6
12.5°	123.8	122.9	119.3	116.6	114.9	114.0	113.1	114.0	113.1	114.0	114.0
15°	132.7	130.0	125.6	122.9	120.2	119.3	118.4	119.3	119.3	120.2	119.3
17.5°	142.5	138.9	134.5	130.0	126.4	125.6	125.6	125.6	126.4	127.3	126.4
20°	154.0	149.6	143.4	138.0	134.5	133.6	133.6	134.5	135.3	136.2	136.2
22.5°	165.6	162.1	153.2	146.0	144.3	143.4	142.5	144.3	146.0	146.9	147.8
25°	183.4	176.3	165.6	157.6	154.0	154.0	154.9	156.7	157.6	159.4	158.5
27.5°	202.1	194.1	180.8	170.1	167.4	166.5	168.3	170.1	173.6	173.6	172.7
30°	228.0	214.6	197.7	187.9	180.8	181.7	184.3	187.0	190.6	192.3	192.3
32.5°	257.3	243.1	219.9	204.8	201.2	202.1	203.0	207.5	211.0	214.6	211.9
35°	295.6	277.8	249.3	232.4	223.5	222.6	226.2	231.5	235.1	236.9	236.9
37.5°	337.5	314.3	278.7	264.5	253.8	252.9	253.8	258.2	262.7	264.5	268.0
40°	388.2	359.7	317.9	294.7	286.7	284.9	288.5	294.7	294.7	297.4	298.3
42.5°	450.6	414.1	367.8	337.5	327.7	327.7	326.8	332.1	332.1	332.1	330.4
45°	529.8	488.9	428.3	397.1	380.2	371.3	374.0	370.4	369.5	372.2	364.2
47.5°	606.4	554.8	483.5	449.7	432.8	427.4	417.6	414.9	410.5	410.5	398.9
50°	695.4	631.3	562.8	514.7	498.7	483.5	475.5	463.0	449.7	447.0	442.6
52.5°	844.1	764.0	656.3	604.6	563.7	548.5	529.8	513.8	497.8	485.3	492.4
55°	904.7	822.8	720.4	670.5	642.0	627.8	593.0	571.7	547.6	529.8	539.6
57.5°	935.0	845.9	750.6	713.3	705.2	691.9	666.1	629.5	601.9	579.7	581.5
60°	951.9	858.4	766.7	732.8	728.4	737.3	723.9	699.0	656.3	634.0	631.3
62.5°	1016.9	918.9	812.1	764.0	754.2	760.4	764.0	748.9	713.3	683.9	675.9
65°	1030.3	926.1	821.0	789.8	790.7	792.5	795.2	779.1	761.3	724.8	717.7
67.5°	990.2	887.8	794.3	768.5	770.2	790.7	806.7	805.9	786.3	755.1	752.4
70°	929.6	829.9	743.5	720.4	724.8	743.5	778.3	796.1	792.5	772.0	776.5
72.5°	835.2	746.2	670.5	652.7	663.4	681.2	714.1	746.2	764.9	769.3	779.1
75°	724.8	653.6	582.4	571.7	579.7	600.2	630.4	667.8	708.8	731.1	737.3
77.5°	598.4	533.4	480.8	473.7	485.3	504.0	534.3	563.7	610.0	649.1	658.0
80°	468.4	412.3	374.9	368.6	375.8	391.8	414.9	439.0	483.5	513.8	518.2
82.5°	325.0	291.2	267.1	263.6	268.0	274.3	293.0	315.2	340.2	364.2	366.9
85°	188.8	167.4	161.2	155.8	165.6	165.6	170.1	182.5	195.0	196.8	202.1
87.5°	34.7	32.9	33.8	24.9	31.2	22.3	22.3	28.5	21.4	24.9	20.5
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)