

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: P400646

Luminaire Tested: **TT-D4-827-U-DL**

Issue Date: 6/3/2020

Test Information

Test Method: LM-79-08
Report Number: P400646
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1908-473-26)
Test Lab: INNOVATION CENTER
Issue Date: 6/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TT-D4-827-U-DL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE
2700K, 80 CRI LEDS AND DRIVE LANE DISTRIBUTION
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5276 lumens
Efficiency: N/A
Efficacy: 88.2 lumens/watt
Luminous Opening: Circular (Dia: 1.12' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 59.8
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: 28.75 FT



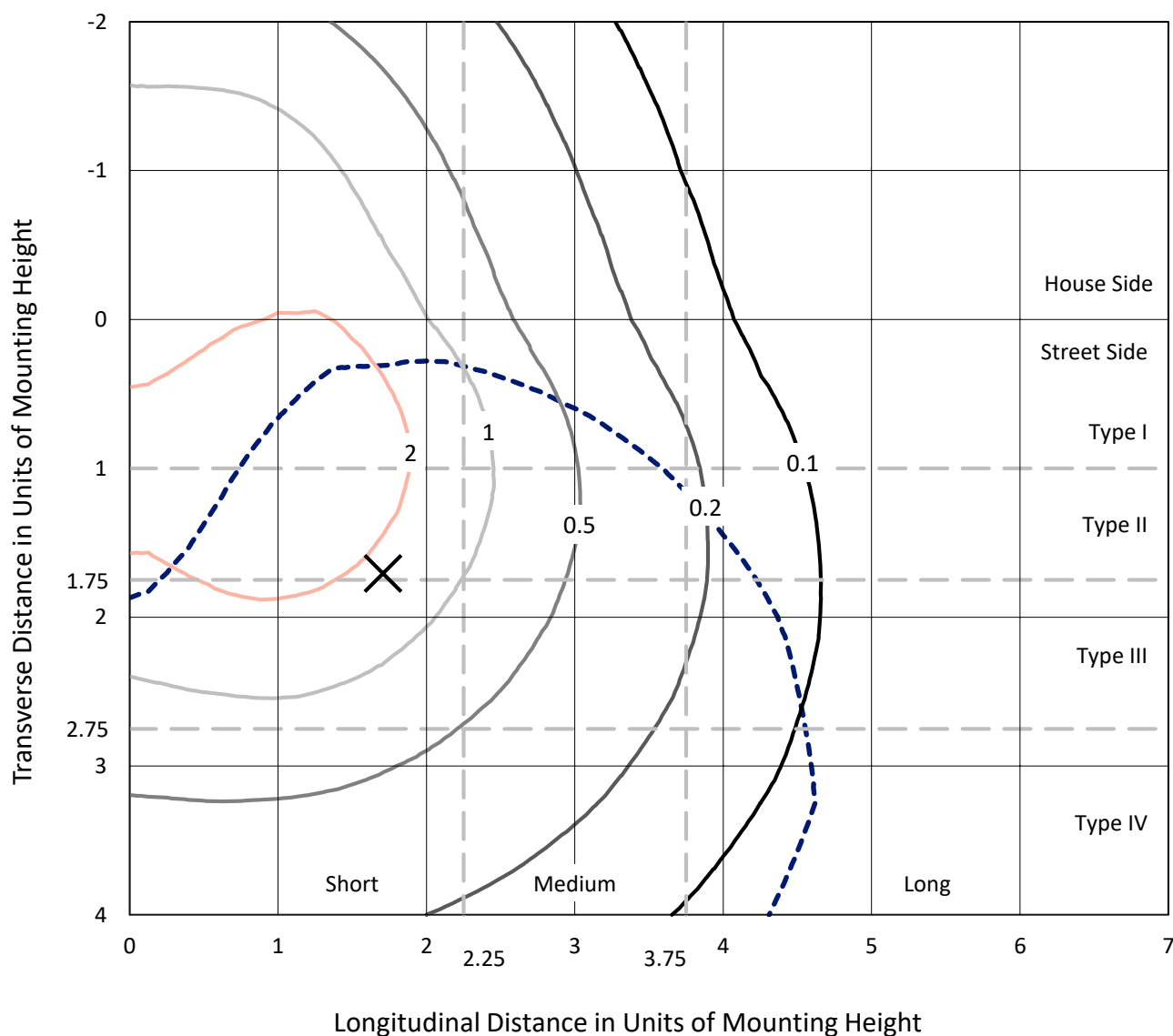
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

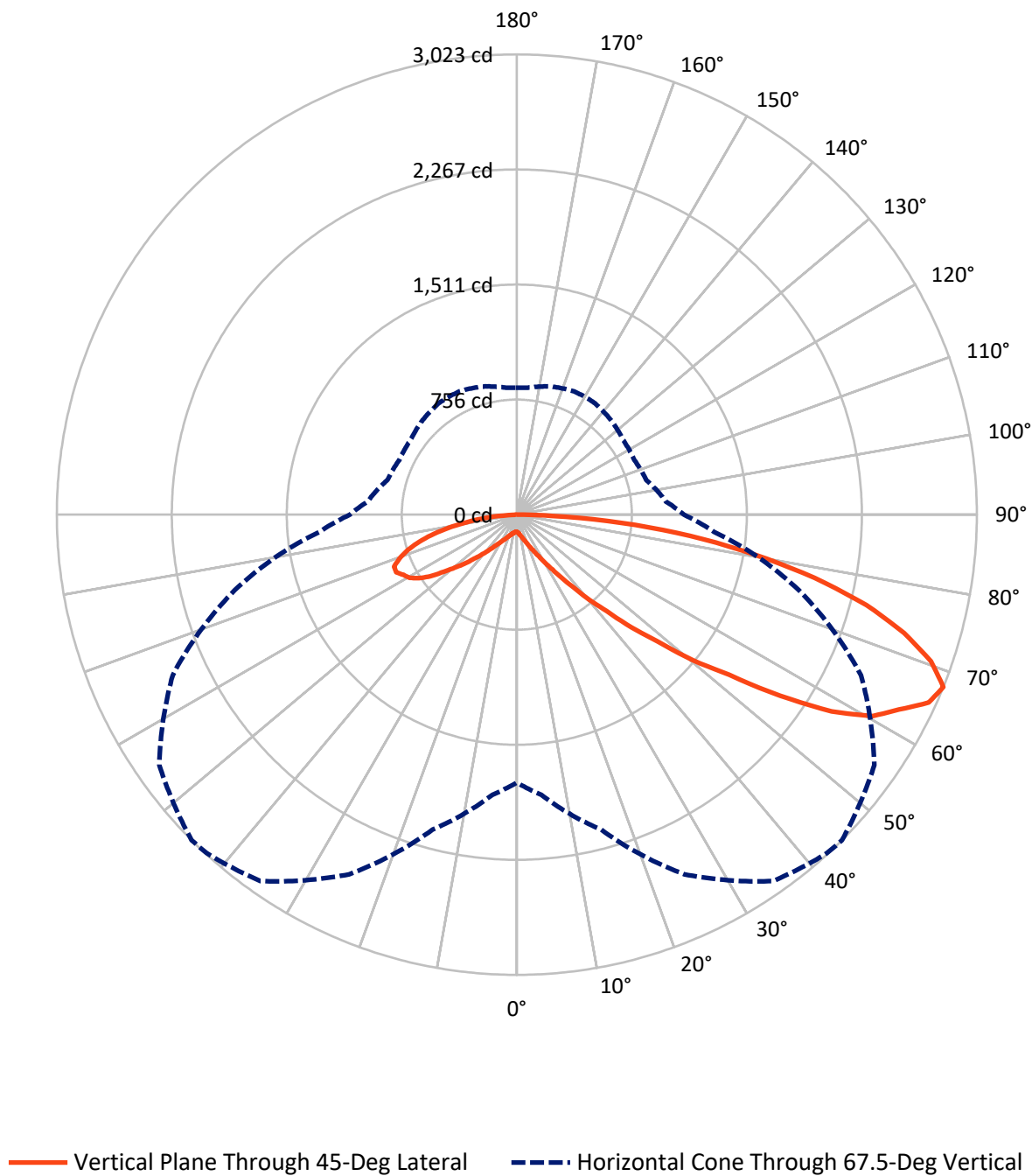


Based on 10 foot mounting height. Maximum calculated value = 4 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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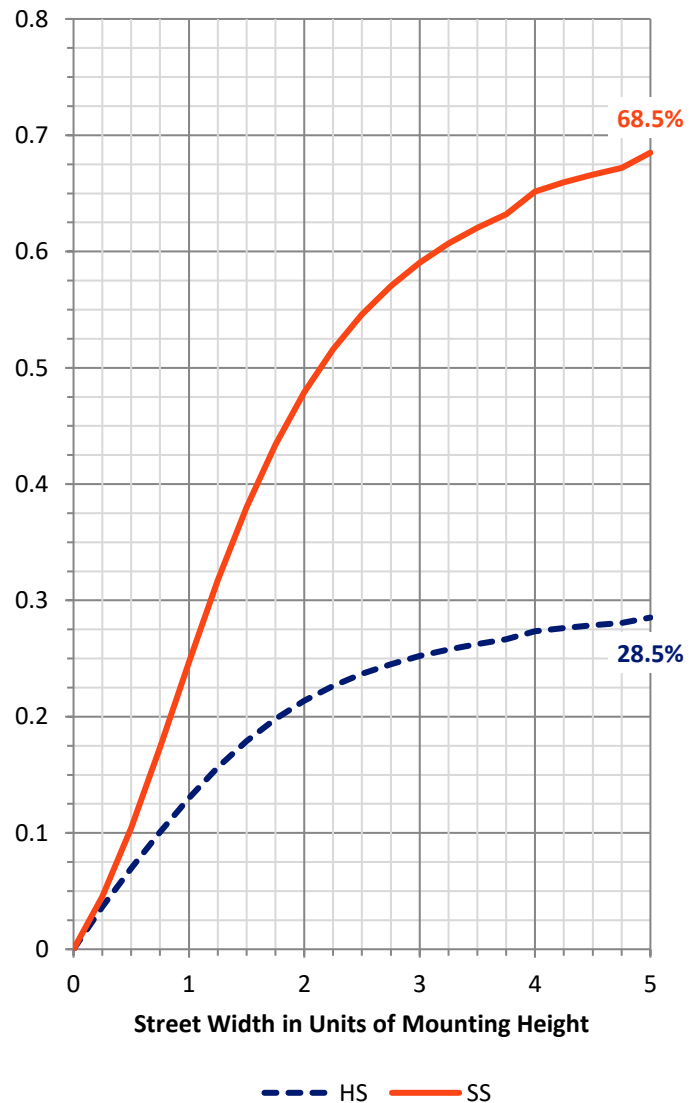
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1537.4	0.0	1537.4
	% Fixture	29.1	0.0	29.1
Street Side	Lumens	3738.6	0.0	3738.6
	% Fixture	70.9	0.0	70.9
Total	Lumens	5276.0	0.0	5276.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.8	0.2
10°-20°	43.8	0.8
20°-30°	103.5	2.0
30°-40°	234.2	4.4
40°-50°	522.2	9.9
50°-60°	1049.8	19.9
60°-70°	1541.9	29.2
70°-80°	1355.9	25.7
80°-90°	412.8	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°	5276.0	100.0
0°-180°	5276.0	100.0

Coefficient of Utilization



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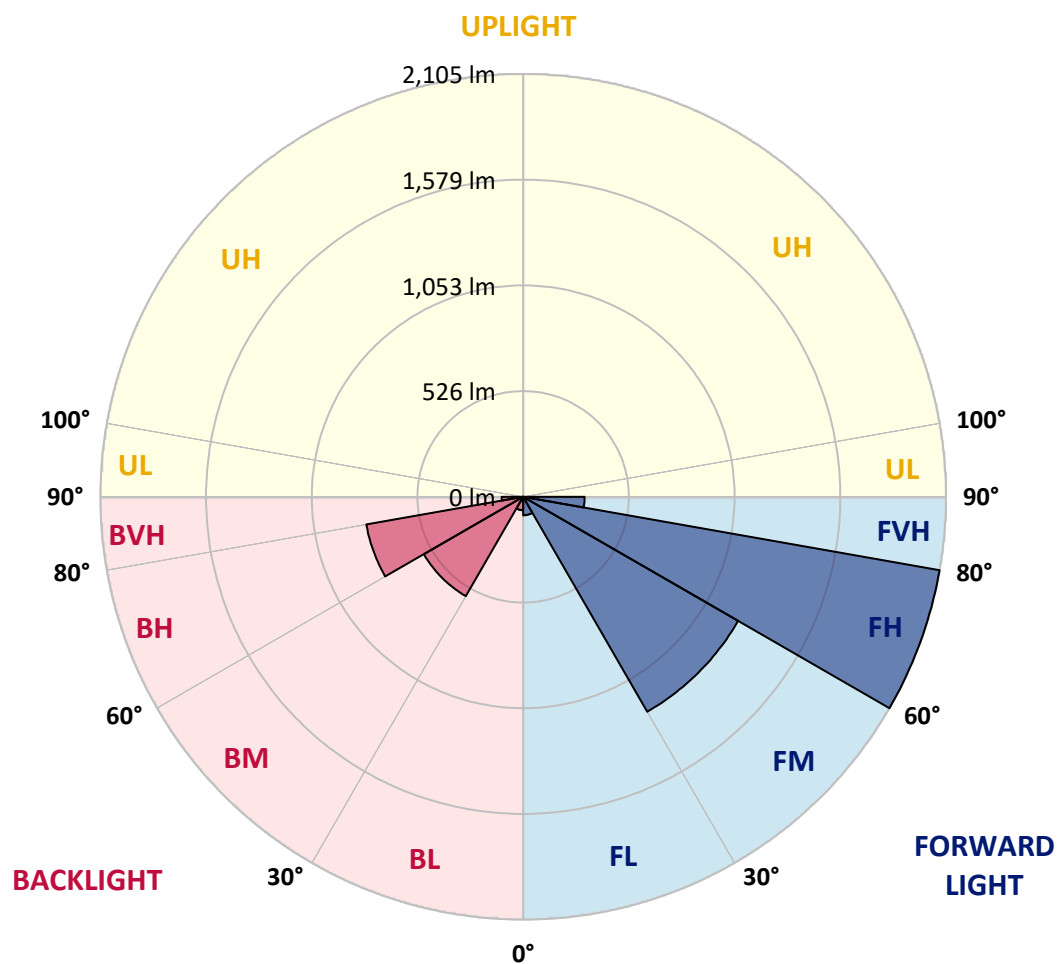
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	92.1	1.7			
FM	(30°-60°)	1235.5	23.4			
FH	(60°-80°)	2105.0	39.9			G2/5000
FVH	(80°-90°)	305.9	5.8			G3/500
BL	(0°-30°)	66.9	1.3	B0/110		
BM	(30°-60°)	570.8	10.8	B1/1000		
BH	(60°-80°)	792.8	15.0	B2/1000		G2/1000
BVH	(80°-90°)	106.9	2.0			G2/225
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°	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4
2.5°	119.4	118.4	118.4	118.4	117.4	117.4	117.4	117.4	116.4	116.4	116.4
5°	126.3	125.3	126.3	124.3	123.3	123.3	122.3	122.3	121.3	120.4	119.4
7.5°	136.1	135.2	135.2	133.2	132.2	131.2	131.2	129.2	128.3	126.3	124.3
10°	147.0	147.0	146.0	145.0	143.1	141.1	141.1	138.1	137.1	134.2	131.2
12.5°	159.8	159.8	159.8	157.9	155.9	154.9	152.9	150.9	148.0	143.1	140.1
15°	175.6	175.6	175.6	173.6	171.7	169.7	168.7	164.8	159.8	154.9	149.0
17.5°	195.3	193.4	193.4	191.4	189.4	188.4	186.5	182.5	175.6	169.7	161.8
20°	217.0	216.1	215.1	215.1	213.1	211.1	210.1	204.2	196.3	185.5	175.6
22.5°	241.7	240.7	240.7	242.7	241.7	238.7	238.7	229.9	219.0	206.2	191.4
25°	272.3	271.3	273.3	277.2	277.2	275.3	272.3	263.4	247.6	229.9	212.1
27.5°	305.8	304.8	308.8	315.7	317.7	314.7	312.7	302.9	285.1	261.4	235.8
30°	346.3	347.3	358.1	366.0	370.9	369.0	368.0	357.1	328.5	300.9	267.4
32.5°	395.6	392.7	406.5	419.3	428.2	433.1	430.1	417.3	392.7	349.2	306.8
35°	447.9	448.9	465.7	484.4	505.1	507.1	513.0	500.2	466.6	415.3	356.1
37.5°	516.0	508.1	529.8	565.3	590.0	611.7	607.7	599.8	560.4	492.3	411.4
40°	577.1	575.2	605.7	655.1	700.5	732.0	736.0	726.1	673.8	577.1	470.6
42.5°	647.2	653.1	695.5	763.6	832.7	878.0	867.2	862.3	801.1	677.8	551.5
45°	718.2	737.9	792.2	890.9	971.8	1036.9	1055.6	1038.9	963.9	836.6	654.1
47.5°	804.0	830.7	897.8	1031.0	1163.2	1239.1	1243.1	1293.4	1179.9	989.5	760.6
50°	917.5	929.3	1023.1	1185.8	1367.4	1473.9	1504.5	1505.5	1392.0	1143.4	881.0
52.5°	1029.0	1037.9	1161.2	1371.3	1618.0	1739.3	1746.2	1784.7	1629.8	1392.0	1053.6
55°	1163.2	1159.2	1328.9	1581.5	1872.5	2049.1	2100.4	2152.7	1955.4	1588.4	1152.3
57.5°	1293.4	1287.5	1491.7	1823.2	2220.8	2396.4	2438.8	2401.3	2108.3	1670.3	1200.6
60°	1413.7	1434.5	1683.1	2090.5	2490.1	2657.8	2686.4	2584.8	2206.9	1733.4	1231.2
62.5°	1539.0	1580.5	1881.4	2313.5	2696.3	2816.6	2818.6	2699.2	2371.7	1855.7	1330.9
65°	1656.4	1722.5	2035.3	2503.9	2840.3	2960.7	2974.5	2867.0	2533.5	1962.3	1347.6
67.5°	1760.0	1847.8	2141.8	2606.5	2938.0	3015.9	3022.8	2867.9	2495.0	1918.9	1301.3
70°	1843.9	1914.9	2207.9	2608.5	2869.9	2891.6	2886.7	2721.9	2388.5	1833.0	1223.3
72.5°	1876.4	1934.7	2176.4	2486.1	2669.6	2664.7	2660.8	2508.8	2212.9	1690.0	1110.9
75°	1830.1	1846.8	2003.7	2224.7	2341.1	2368.7	2372.7	2235.6	1941.6	1477.9	953.0
77.5°	1638.7	1629.8	1750.2	1896.2	1984.0	2003.7	1999.8	1885.3	1627.8	1228.3	799.1
80°	1299.3	1318.0	1393.0	1489.7	1577.5	1599.2	1585.4	1498.6	1266.7	958.0	613.6
82.5°	908.6	931.3	994.5	1067.5	1133.6	1133.6	1146.4	1062.5	897.8	687.6	429.2
85°	490.3	477.5	546.6	629.4	676.8	685.7	690.6	663.0	555.4	415.3	254.5
87.5°	80.9	86.8	107.5	164.8	187.4	217.0	230.9	180.5	109.5	70.0	51.3
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°	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4
2.5°	116.4	115.4	114.4	113.5	113.5	112.5	112.5	112.5	113.5	113.5	113.5
5°	119.4	118.4	117.4	116.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4
7.5°	124.3	122.3	121.3	119.4	117.4	117.4	116.4	116.4	116.4	117.4	116.4
10°	130.2	128.3	126.3	123.3	122.3	121.3	120.4	120.4	121.3	121.3	120.4
12.5°	137.1	136.1	132.2	129.2	127.3	126.3	125.3	126.3	125.3	126.3	126.3
15°	147.0	144.0	139.1	136.1	133.2	132.2	131.2	132.2	132.2	133.2	132.2
17.5°	157.9	153.9	149.0	144.0	140.1	139.1	139.1	139.1	140.1	141.1	140.1
20°	170.7	165.7	158.8	152.9	149.0	148.0	148.0	149.0	150.0	150.9	150.9
22.5°	183.5	179.6	169.7	161.8	159.8	158.8	157.9	159.8	161.8	162.8	163.8
25°	203.2	195.3	183.5	174.6	170.7	170.7	171.7	173.6	174.6	176.6	175.6
27.5°	223.9	215.1	200.3	188.4	185.5	184.5	186.5	188.4	192.4	192.4	191.4
30°	252.6	237.8	219.0	208.2	200.3	201.3	204.2	207.2	211.1	213.1	213.1
32.5°	285.1	269.3	243.7	226.9	223.0	223.9	224.9	229.9	233.8	237.8	234.8
35°	327.5	307.8	276.2	257.5	247.6	246.6	250.6	256.5	260.5	262.4	262.4
37.5°	373.9	348.3	308.8	293.0	281.2	280.2	281.2	286.1	291.0	293.0	297.0
40°	430.1	398.6	352.2	326.6	317.7	315.7	319.6	326.6	326.6	329.5	330.5
42.5°	499.2	458.8	407.5	373.9	363.1	363.1	362.1	368.0	368.0	368.0	366.0
45°	587.0	541.6	474.5	440.0	421.3	411.4	414.4	410.4	409.4	412.4	403.5
47.5°	671.8	614.6	535.7	498.2	479.5	473.6	462.7	459.7	454.8	454.8	442.0
50°	770.5	699.5	623.5	570.2	552.5	535.7	526.8	513.0	498.2	495.3	490.3
52.5°	935.3	846.5	727.1	669.9	624.5	607.7	587.0	569.2	551.5	537.7	545.6
55°	1002.3	911.6	798.1	742.9	711.3	695.5	657.1	633.4	606.7	587.0	597.9
57.5°	1035.9	937.2	831.7	790.2	781.4	766.6	737.9	697.5	666.9	642.3	644.2
60°	1054.6	951.0	849.4	811.9	807.0	816.9	802.1	774.5	727.1	702.4	699.5
62.5°	1126.7	1018.1	899.7	846.5	835.6	842.5	846.5	829.7	790.2	757.7	748.8
65°	1141.5	1026.0	909.6	875.1	876.1	878.0	881.0	863.2	843.5	803.1	795.2
67.5°	1097.1	983.6	880.0	851.4	853.4	876.1	893.8	892.8	871.1	836.6	833.6
70°	1030.0	919.5	823.8	798.1	803.1	823.8	862.3	882.0	878.0	855.4	860.3
72.5°	925.4	826.7	742.9	723.2	735.0	754.7	791.2	826.7	847.5	852.4	863.2
75°	803.1	724.1	645.2	633.4	642.3	664.9	698.5	739.9	785.3	810.0	816.9
77.5°	663.0	591.0	532.7	524.9	537.7	558.4	591.9	624.5	675.8	719.2	729.1
80°	518.9	456.8	415.3	408.4	416.3	434.1	459.7	486.4	535.7	569.2	574.2
82.5°	360.1	322.6	296.0	292.0	297.0	303.9	324.6	349.2	376.9	403.5	406.5
85°	209.2	185.5	178.6	172.6	183.5	183.5	188.4	202.2	216.1	218.0	223.9
87.5°	38.5	36.5	37.5	27.6	34.5	24.7	24.7	31.6	23.7	27.6	22.7
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)