

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: P821356

Luminaire Tested: **TT-D2-750-24VDC-DL**

Issue Date: 5/19/2020



Test Information

Test Method: LM-79-08
Report Number: P821356
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-D2-750-24VDC-DL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE
5000K, 70 CRI LEDS AND DRIVE LANE DISTRIBUTION
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

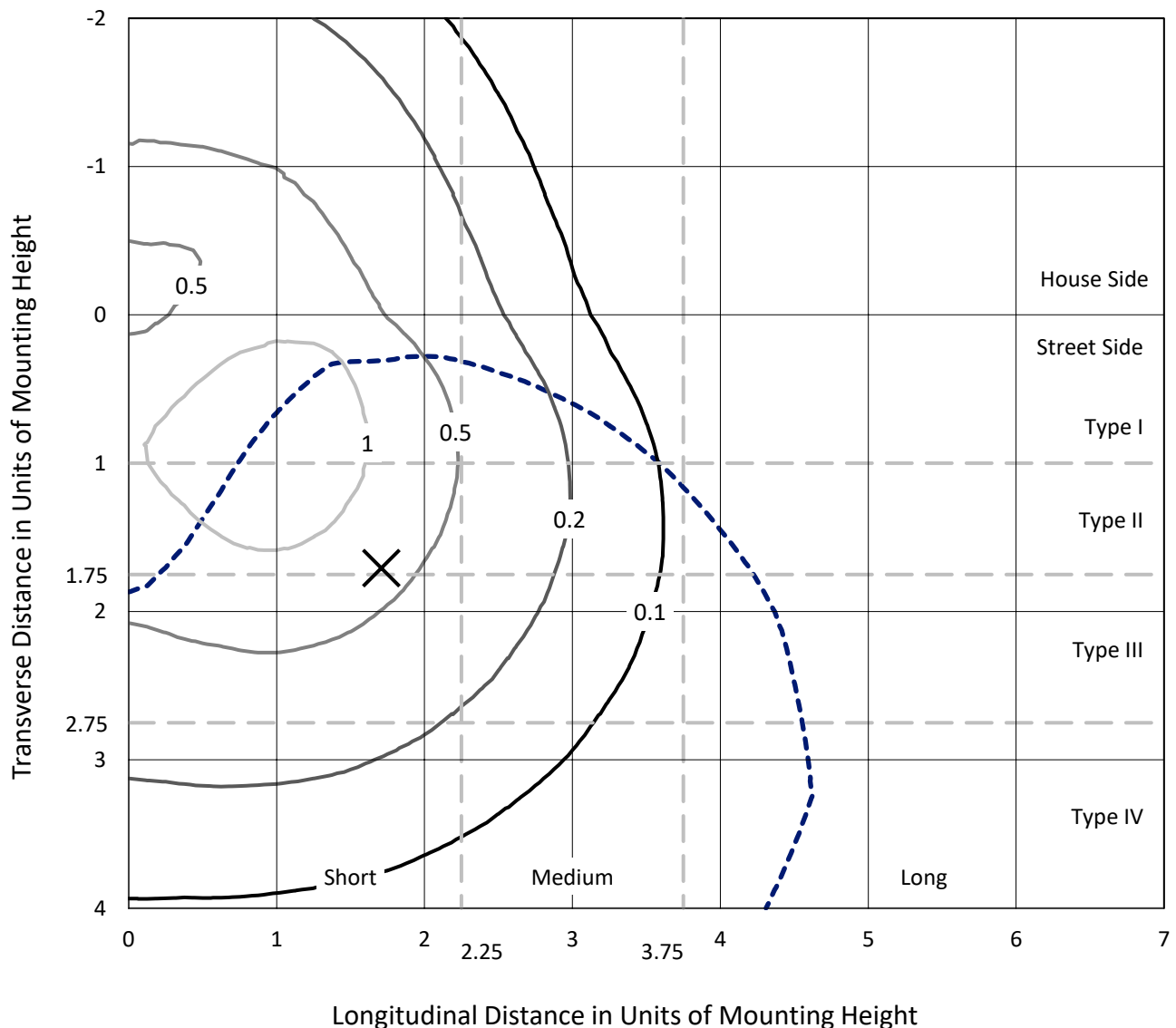
Lumens per Lamp: N/A
Luminaire Lumens: 4475 lumens
Efficiency: N/A
Efficacy: 117.8 lumens/watt
Luminous Opening: Circular (Dia: 1.12' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 38
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: P821356
CATALOG NUMBER: TT-D2-750-24VDC-DL

Iso-Footcandle Lines of Horizontal Illumination

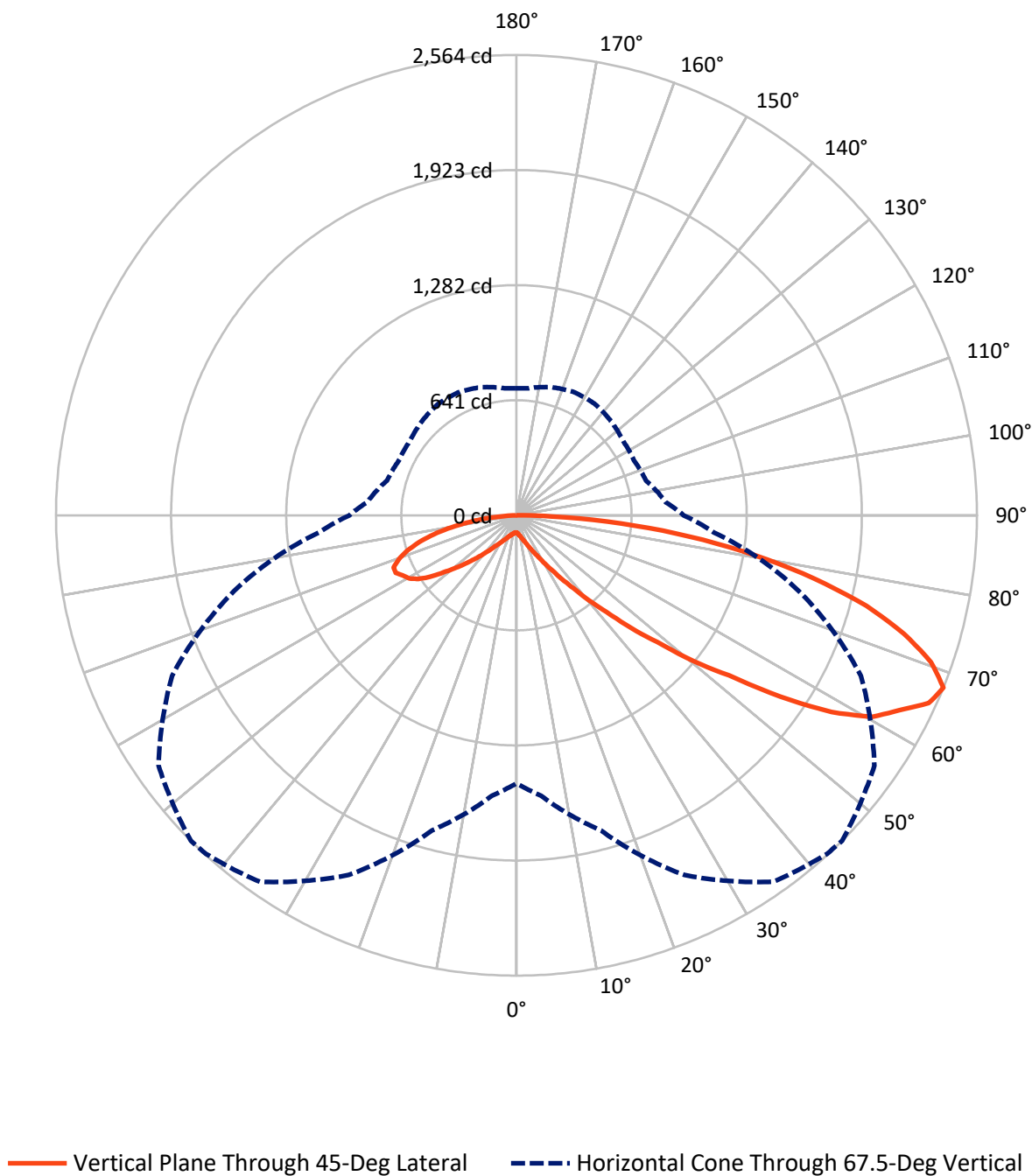
× Max cd
- - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 1.5 fc
Type IV - Short - N/A

REPORT NUMBER: P821356
CATALOG NUMBER: TT-D2-750-24VDC-DL

Luminous Intensity Polar Plot



REPORT NUMBER: P821356

CATALOG NUMBER: TT-D2-750-24VDC-DL

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1304.0	0.0	1304.0
	% Fixture	29.1	0.0	29.1
Street Side	Lumens	3171.0	0.0	3171.0
	% Fixture	70.9	0.0	70.9
Total	Lumens	4475.0	0.0	4475.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.0	0.2
10°-20°	37.1	0.8
20°-30°	87.8	2.0
30°-40°	198.7	4.4
40°-50°	442.9	9.9
50°-60°	890.5	19.9
60°-70°	1307.9	29.2
70°-80°	1150.0	25.7
80°-90°	350.1	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°	4475.0	100.0
0°-180°	4475.0	100.0

Coefficient of Utilization



REPORT NUMBER: P821356

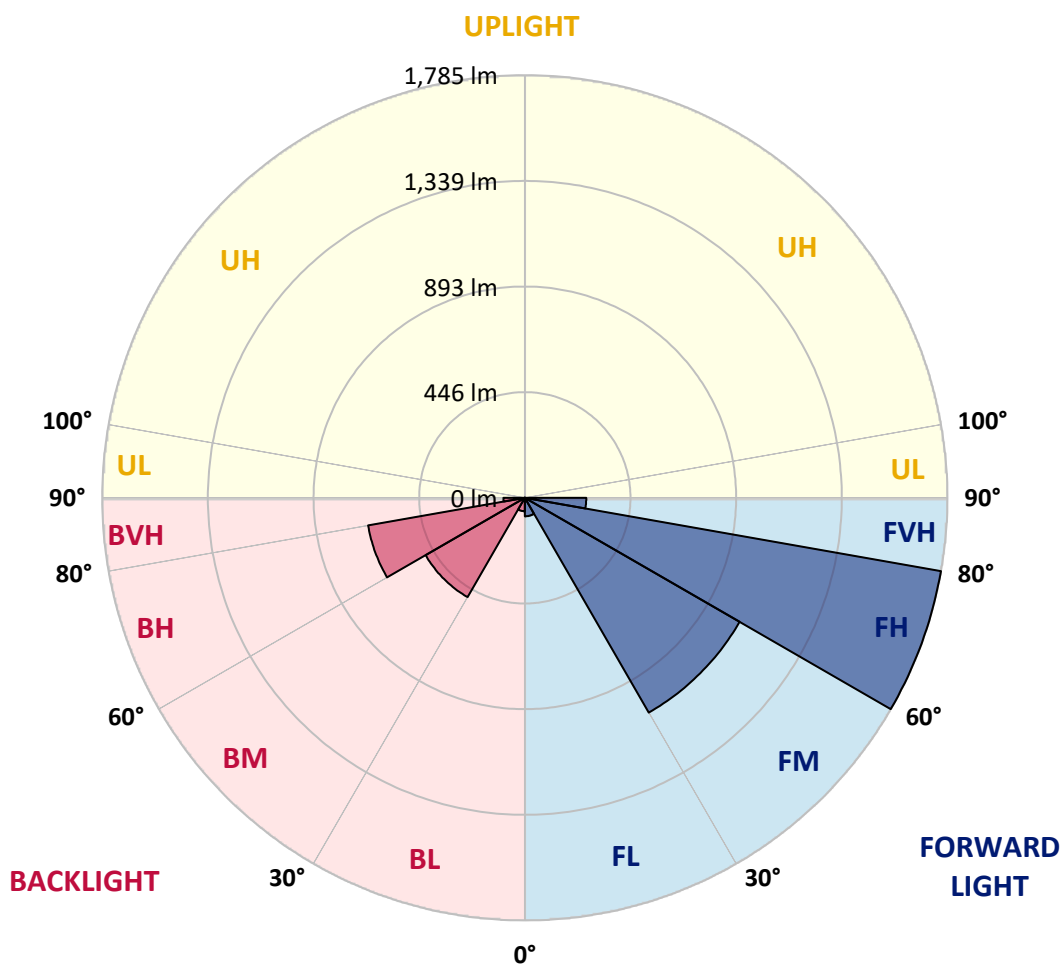
CATALOG NUMBER: TT-D2-750-24VDC-DL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	78.1	1.7			
FM	(30°-60°)	1047.9	23.4			
FH	(60°-80°)	1785.4	39.9			G1/1800
FVH	(80°-90°)	259.4	5.8			G3/500
BL	(0°-30°)	56.8	1.3	B0/110		
BM	(30°-60°)	484.1	10.8	B1/1000		
BH	(60°-80°)	672.5	15.0	B2/1000		G2/1000
BVH	(80°-90°)	90.7	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



REPORT NUMBER: P821356

CATALOG NUMBER: TT-D2-750-24VDC-DL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	42.5°	45°	55°	65°	75°	85°
0°	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
2.5°	101.3	100.4	100.4	100.4	99.6	99.6	99.6	99.6	98.7	98.7	98.7
5°	107.1	106.3	107.1	105.4	104.6	104.6	103.8	103.8	102.9	102.1	101.3
7.5°	115.5	114.6	114.6	113.0	112.1	111.3	111.3	109.6	108.8	107.1	105.4
10°	124.7	124.7	123.8	123.0	121.3	119.7	119.7	117.1	116.3	113.8	111.3
12.5°	135.6	135.6	135.6	133.9	132.2	131.4	129.7	128.0	125.5	121.3	118.8
15°	148.9	148.9	148.9	147.3	145.6	143.9	143.1	139.7	135.6	131.4	126.4
17.5°	165.7	164.0	164.0	162.3	160.7	159.8	158.2	154.8	148.9	143.9	137.2
20°	184.1	183.3	182.4	182.4	180.7	179.1	178.2	173.2	166.5	157.3	148.9
22.5°	205.0	204.2	204.2	205.8	205.0	202.5	202.5	195.0	185.8	174.9	162.3
25°	231.0	230.1	231.8	235.1	235.1	233.5	231.0	223.4	210.0	195.0	179.9
27.5°	259.4	258.6	261.9	267.8	269.4	266.9	265.3	256.9	241.8	221.7	200.0
30°	293.7	294.5	303.8	310.4	314.6	313.0	312.1	302.9	278.6	255.2	226.8
32.5°	335.6	333.0	344.8	355.6	363.2	367.3	364.8	354.0	333.0	296.2	260.2
35°	379.9	380.7	395.0	410.9	428.4	430.1	435.1	424.2	395.8	352.3	302.1
37.5°	437.6	430.9	449.4	479.5	500.4	518.8	515.5	508.8	475.3	417.6	348.9
40°	489.5	487.8	513.8	555.6	594.1	620.9	624.2	615.9	571.5	489.5	399.1
42.5°	548.9	554.0	589.9	647.7	706.2	744.7	735.5	731.3	679.5	574.9	467.8
45°	609.2	625.9	671.9	755.6	824.2	879.5	895.4	881.1	817.5	709.6	554.8
47.5°	682.0	704.6	761.5	874.4	986.6	1051.0	1054.3	1097.0	1000.8	839.3	645.2
50°	778.2	788.2	867.7	1005.8	1159.8	1250.2	1276.1	1276.9	1180.7	969.8	747.2
52.5°	872.8	880.3	984.9	1163.1	1372.3	1475.2	1481.1	1513.7	1382.4	1180.7	893.7
55°	986.6	983.2	1127.1	1341.4	1588.2	1738.0	1781.5	1825.9	1658.5	1347.2	977.4
57.5°	1097.0	1092.0	1265.2	1546.4	1883.6	2032.5	2068.5	2036.7	1788.2	1416.7	1018.4
60°	1199.1	1216.7	1427.6	1773.1	2112.0	2254.3	2278.6	2192.4	1871.9	1470.2	1044.3
62.5°	1305.4	1340.5	1595.7	1962.3	2286.9	2389.0	2390.7	2289.4	2011.6	1574.0	1128.8
65°	1405.0	1461.0	1726.3	2123.8	2409.1	2511.2	2522.9	2431.7	2148.9	1664.4	1143.0
67.5°	1492.8	1567.3	1816.7	2210.8	2491.9	2558.0	2563.9	2432.5	2116.2	1627.5	1103.7
70°	1563.9	1624.2	1872.7	2212.5	2434.2	2452.6	2448.4	2308.7	2025.9	1554.7	1037.6
72.5°	1591.6	1640.9	1845.9	2108.7	2264.3	2260.2	2256.8	2127.9	1876.9	1433.4	942.2
75°	1552.2	1566.5	1699.5	1886.9	1985.7	2009.1	2012.5	1896.2	1646.8	1253.5	808.3
77.5°	1389.9	1382.4	1484.5	1608.3	1682.8	1699.5	1696.2	1599.1	1380.7	1041.8	677.8
80°	1102.0	1117.9	1181.5	1263.5	1338.0	1356.4	1344.7	1271.1	1074.4	812.5	520.5
82.5°	770.7	789.9	843.5	905.4	961.5	961.5	972.3	901.2	761.5	583.2	364.0
85°	415.9	405.0	463.6	533.9	574.0	581.6	585.7	562.3	471.1	352.3	215.9
87.5°	68.6	73.6	91.2	139.7	159.0	184.1	195.8	153.1	92.9	59.4	43.5
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: P821356

CATALOG NUMBER: TT-D2-750-24VDC-DL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
2.5°	98.7	97.9	97.1	96.2	96.2	95.4	95.4	95.4	96.2	96.2	96.2
5°	101.3	100.4	99.6	98.7	97.1	97.1	97.1	97.1	97.1	97.1	97.1
7.5°	105.4	103.8	102.9	101.3	99.6	99.6	98.7	98.7	98.7	99.6	98.7
10°	110.5	108.8	107.1	104.6	103.8	102.9	102.1	102.1	102.9	102.9	102.1
12.5°	116.3	115.5	112.1	109.6	107.9	107.1	106.3	107.1	106.3	107.1	107.1
15°	124.7	122.2	118.0	115.5	113.0	112.1	111.3	112.1	112.1	113.0	112.1
17.5°	133.9	130.5	126.4	122.2	118.8	118.0	118.0	118.0	118.8	119.7	118.8
20°	144.8	140.6	134.7	129.7	126.4	125.5	125.5	126.4	127.2	128.0	128.0
22.5°	155.6	152.3	143.9	137.2	135.6	134.7	133.9	135.6	137.2	138.1	138.9
25°	172.4	165.7	155.6	148.1	144.8	144.8	145.6	147.3	148.1	149.8	148.9
27.5°	189.9	182.4	169.9	159.8	157.3	156.5	158.2	159.8	163.2	163.2	162.3
30°	214.2	201.7	185.8	176.6	169.9	170.7	173.2	175.7	179.1	180.7	180.7
32.5°	241.8	228.4	206.7	192.5	189.1	189.9	190.8	195.0	198.3	201.7	199.2
35°	277.8	261.1	234.3	218.4	210.0	209.2	212.5	217.6	220.9	222.6	222.6
37.5°	317.1	295.4	261.9	248.5	238.5	237.6	238.5	242.7	246.9	248.5	251.9
40°	364.8	338.1	298.7	277.0	269.4	267.8	271.1	277.0	277.0	279.5	280.3
42.5°	423.4	389.1	345.6	317.1	307.9	307.9	307.1	312.1	312.1	312.1	310.4
45°	497.9	459.4	402.5	373.2	357.3	348.9	351.4	348.1	347.3	349.8	342.2
47.5°	569.8	521.3	454.4	422.6	406.7	401.7	392.5	389.9	385.8	385.8	374.9
50°	653.5	593.3	528.8	483.7	468.6	454.4	446.8	435.1	422.6	420.1	415.9
52.5°	793.3	718.0	616.7	568.2	529.7	515.5	497.9	482.8	467.8	456.0	462.7
55°	850.2	773.2	677.0	630.1	603.3	589.9	557.3	537.2	514.6	497.9	507.1
57.5°	878.6	794.9	705.4	670.3	662.7	650.2	625.9	591.6	565.7	544.7	546.4
60°	894.5	806.7	720.5	688.7	684.5	692.9	680.3	656.9	616.7	595.8	593.3
62.5°	955.6	863.6	763.1	718.0	708.8	714.6	718.0	703.7	670.3	642.6	635.1
65°	968.2	870.3	771.5	742.2	743.1	744.7	747.2	732.2	715.4	681.1	674.4
67.5°	930.5	834.3	746.4	722.1	723.8	743.1	758.1	757.3	738.9	709.6	707.1
70°	873.6	779.9	698.7	677.0	681.1	698.7	731.3	748.1	744.7	725.5	729.7
72.5°	784.9	701.2	630.1	613.4	623.4	640.1	671.1	701.2	718.8	723.0	732.2
75°	681.1	614.2	547.3	537.2	544.7	564.0	592.4	627.6	666.1	687.0	692.9
77.5°	562.3	501.2	451.9	445.2	456.0	473.6	502.1	529.7	573.2	610.0	618.4
80°	440.1	387.4	352.3	346.4	353.1	368.2	389.9	412.5	454.4	482.8	487.0
82.5°	305.4	273.6	251.0	247.7	251.9	257.7	275.3	296.2	319.7	342.2	344.8
85°	177.4	157.3	151.5	146.4	155.6	155.6	159.8	171.5	183.3	184.9	189.9
87.5°	32.6	31.0	31.8	23.4	29.3	20.9	20.9	26.8	20.1	23.4	19.2
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)