

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: LUMARK

Report Number: P270274

Luminaire Tested: **NAV-AF-01-D-UNV-SL3-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P270274
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24262)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-AF-01-D-UNV-SL3-7027-600
Description: NAVION ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 615mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3493.1 lumens
Efficiency: N/A
Efficacy: 102.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 34
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

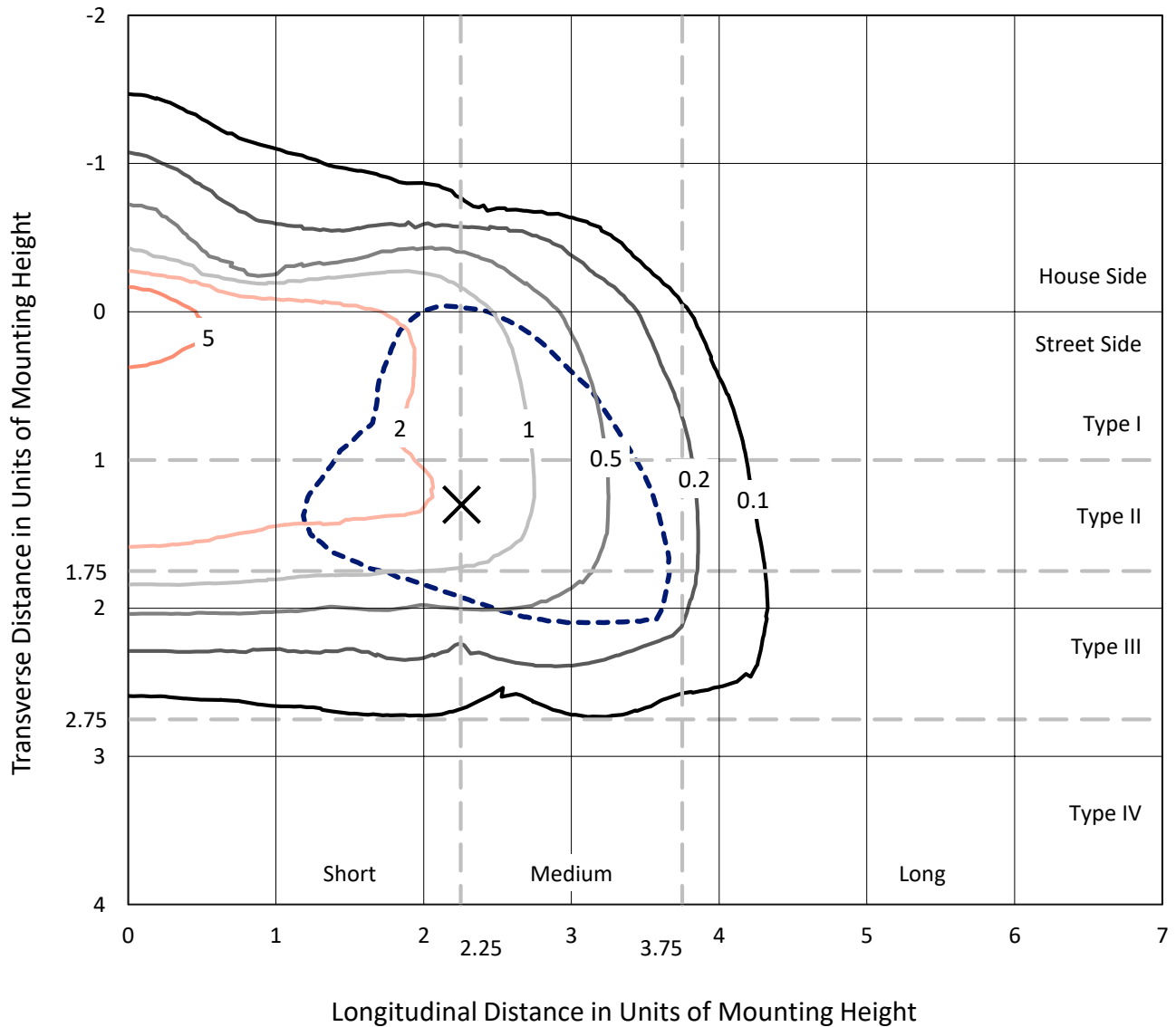


REPORT NUMBER: P270274

CATALOG NUMBER: NAV-AF-01-D-UNV-SL3-7027-600

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

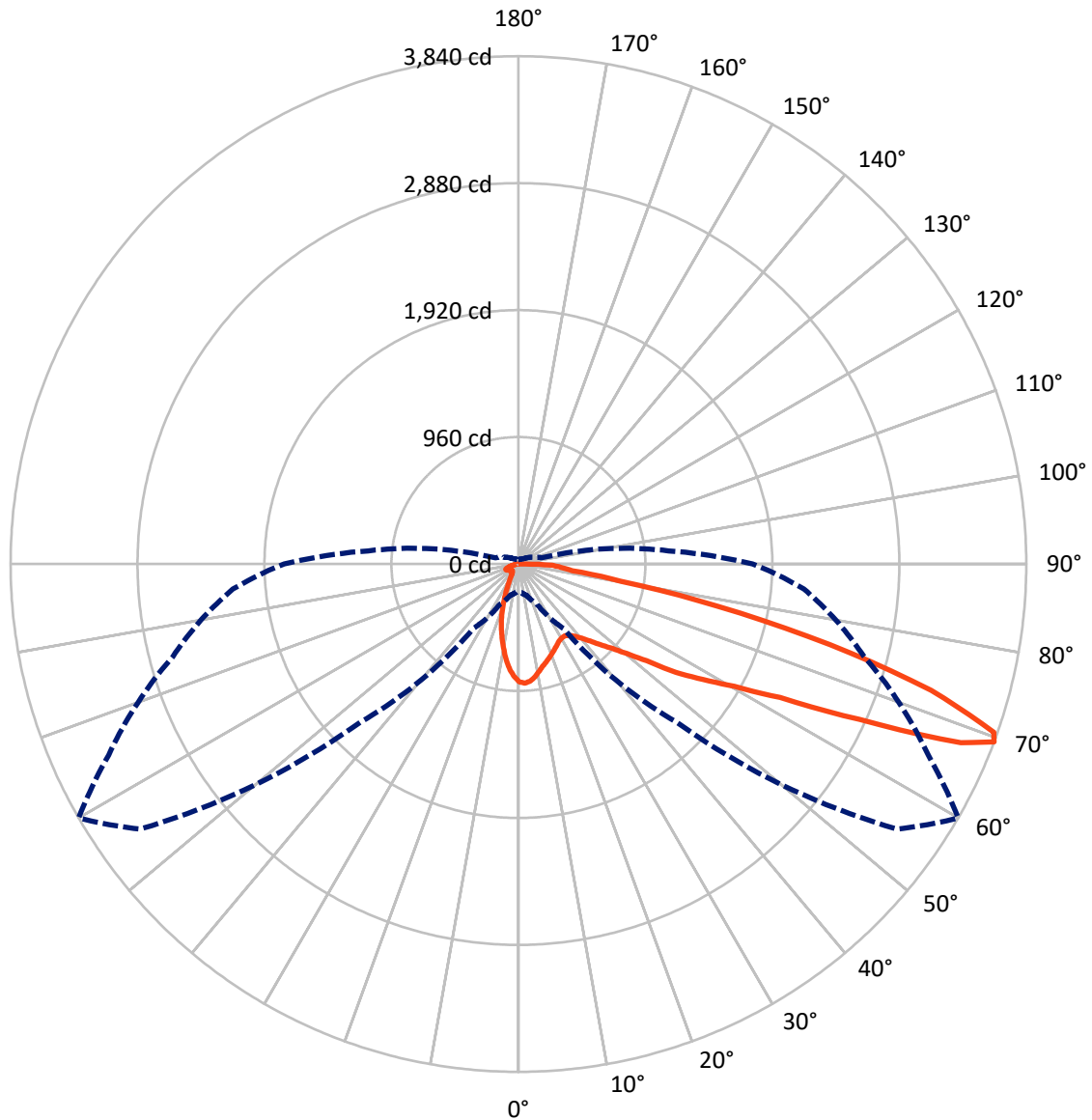


Based on 10 foot mounting height. Maximum calculated value = 8.9 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P270274

CATALOG NUMBER: NAV-AF-01-D-UNV-SL3-7027-600

Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P270274

CATALOG NUMBER: NAV-AF-01-D-UNV-SL3-7027-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	498.2	0.0	498.2
	% Fixture	14.3	0.0	14.3
Street Side	Lumens	2994.9	0.0	2994.9
	% Fixture	85.7	0.0	85.7
Total	Lumens	3493.1	0.0	3493.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.6	2.2
10°-20°	161.9	4.6
20°-30°	206.5	5.9
30°-40°	284.2	8.1
40°-50°	460.3	13.2
50°-60°	722.5	20.7
60°-70°	963.2	27.6
70°-80°	535.8	15.3
80°-90°	83.1	2.4
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°	3493.1	100.0
0°-180°	3493.1	100.0



REPORT NUMBER: P270274

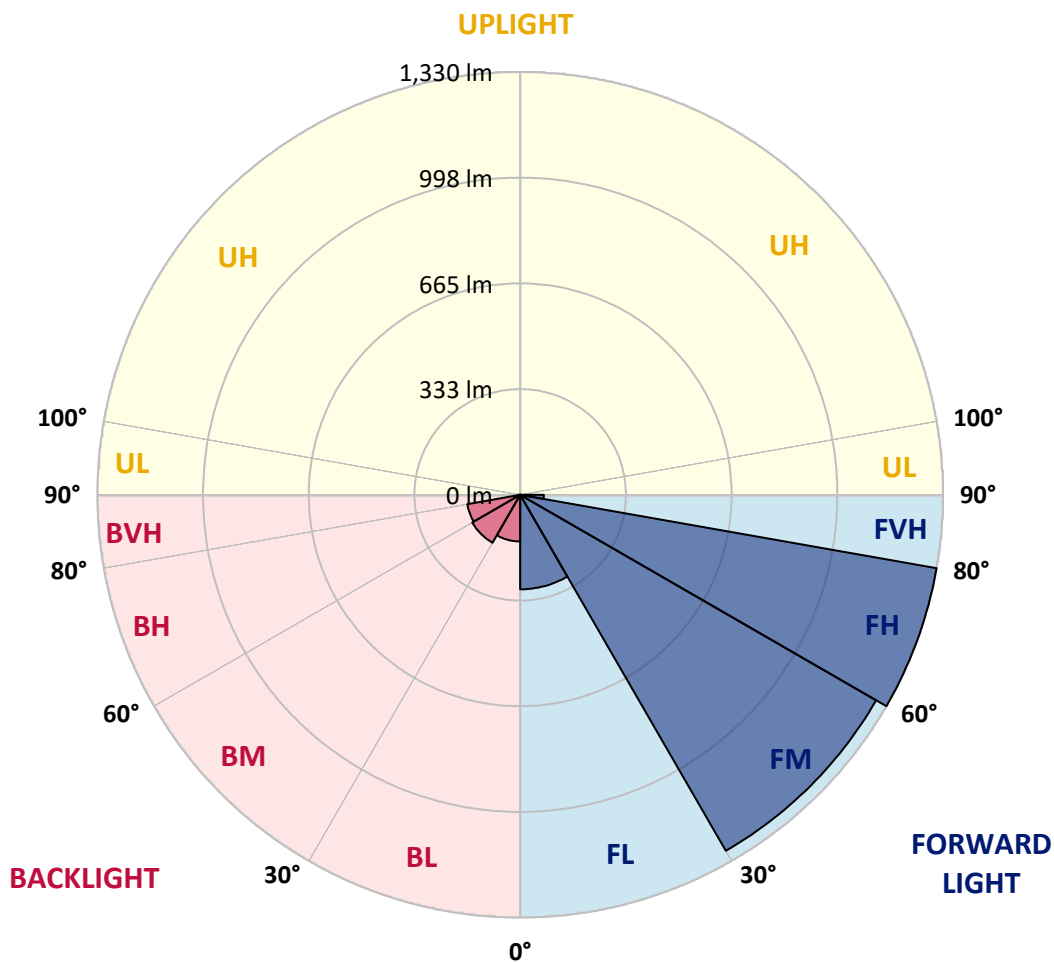
CATALOG NUMBER: NAV-AF-01-D-UNV-SL3-7027-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	297.2	8.5			
FM	(30°-60°)	1293.0	37.0			
FH	(60°-80°)	1330.0	38.1			G1/1800
FVH	(80°-90°)	74.7	2.1			G1/100
BL	(0°-30°)	146.8	4.2	B1/500		
BM	(30°-60°)	174.1	5.0	B0/220		
BH	(60°-80°)	168.9	4.8	B1/500		G1/500
BVH	(80°-90°)	8.4	0.2			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Medium





REPORT NUMBER: P270274

CATALOG NUMBER: NAV-AF-01-D-UNV-SL3-7027-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	891.3	891.3	891.3	891.3	891.3	891.3	891.3	891.3	891.3	891.3	891.3
2.5°	915.1	917.4	917.4	915.5	914.4	907.8	904.1	901.4	896.7	888.0	880.1
5°	882.3	887.0	889.1	890.0	895.8	893.8	894.0	892.1	888.2	878.7	866.0
7.5°	822.3	823.1	826.8	832.8	846.9	856.8	864.9	866.4	865.4	858.6	840.6
10°	763.1	764.6	768.9	779.3	792.8	806.9	824.4	831.6	836.9	834.6	812.0
12.5°	714.2	714.3	719.1	731.0	746.0	763.6	787.4	798.6	811.3	816.5	791.1
15°	666.8	670.0	674.4	688.8	707.3	729.8	757.1	772.5	789.3	804.2	775.0
17.5°	631.0	633.5	636.1	647.9	669.5	697.5	731.3	747.8	770.0	792.8	758.4
20°	611.2	612.1	610.2	616.0	634.2	664.3	703.6	723.6	749.9	781.7	741.5
22.5°	607.3	607.3	599.9	598.7	606.7	632.3	674.8	699.3	731.6	774.1	726.2
25°	626.1	624.7	610.8	598.0	595.1	608.2	647.6	677.6	715.9	773.9	714.8
27.5°	661.7	659.9	642.6	621.2	602.6	597.0	626.5	657.2	703.6	781.5	708.9
30°	706.1	705.3	687.9	661.1	630.3	601.4	618.3	646.7	695.3	795.5	708.8
32.5°	754.7	751.5	740.7	713.9	674.0	626.3	623.2	647.0	693.0	816.2	713.9
35°	806.4	804.2	801.5	774.3	729.6	670.1	644.9	662.6	704.0	844.9	728.4
37.5°	872.3	869.7	874.2	844.6	795.5	727.7	681.6	693.5	726.4	886.5	755.6
40°	989.5	982.1	969.7	924.1	872.7	798.4	734.8	736.5	764.6	942.3	799.0
42.5°	1181.8	1158.8	1096.7	1013.1	954.0	880.2	804.0	795.4	817.5	1016.1	862.2
45°	1374.6	1348.6	1243.9	1110.1	1038.3	968.4	889.5	869.1	883.5	1101.9	943.5
47.5°	1499.2	1486.4	1368.2	1207.1	1126.5	1064.2	987.3	953.8	964.2	1199.1	1043.8
50°	1535.7	1524.8	1431.8	1283.0	1209.7	1180.1	1108.6	1064.0	1065.7	1312.7	1164.2
52.5°	1508.3	1503.9	1442.3	1330.1	1286.5	1302.1	1276.3	1214.2	1199.4	1437.2	1294.5
55°	1471.9	1473.4	1449.7	1377.3	1364.3	1415.9	1495.9	1445.9	1383.2	1566.9	1430.2
57.5°	1357.0	1358.1	1420.3	1467.4	1513.0	1575.4	1666.7	1645.7	1572.7	1706.8	1582.4
60°	1092.7	1101.4	1240.0	1448.7	1683.2	1889.7	1912.0	1875.8	1774.2	1868.1	1780.1
62.5°	780.5	788.4	949.1	1257.7	1663.1	2245.4	2365.0	2220.7	2047.7	2109.4	2058.2
65°	410.2	408.8	533.1	869.1	1400.8	2327.8	3078.6	2833.1	2508.4	2441.1	2327.1
67.5°	229.2	236.6	284.8	438.4	912.9	2048.7	3534.4	3606.8	3149.2	2704.3	2315.4
69°	211.9	214.3	246.7	338.9	595.1	1690.3	3495.2	3840.3	3419.3	2705.3	2166.3
70°	205.8	208.5	238.0	312.3	499.9	1384.9	3352.6	3813.0	3485.0	2645.4	2030.4
72.5°	184.6	188.1	216.6	280.7	421.3	713.9	2700.5	3263.6	3156.7	2312.1	1574.5
75°	157.5	163.5	206.5	278.7	399.1	453.9	1800.9	2431.4	2349.4	1653.5	893.3
77.5°	65.1	65.8	90.3	204.1	418.9	434.3	967.8	1540.1	1363.4	725.1	269.0
80°	45.5	44.6	45.0	59.6	338.0	437.2	496.7	783.3	608.8	191.2	125.9
82.5°	38.3	37.9	39.6	37.4	114.4	496.1	415.2	408.3	286.6	103.0	60.0
85°	25.3	24.7	32.5	34.0	54.4	393.9	446.6	321.0	213.6	55.1	25.5
87.5°	12.3	12.5	18.5	23.0	28.8	124.8	427.9	253.9	165.1	24.0	10.3
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: P270274

CATALOG NUMBER: NAV-AF-01-D-UNV-SL3-7027-600

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	891.3	891.3	891.3	891.3	891.3	891.3	891.3	891.3	891.3	891.3	891.3
2.5°	876.9	870.2	864.2	856.5	850.8	845.8	839.0	838.8	837.7	839.2	839.7
5°	857.4	846.3	829.2	810.2	796.7	779.1	761.9	756.0	749.5	748.7	750.9
7.5°	828.1	810.6	781.5	752.4	723.2	693.5	665.3	650.9	637.1	632.8	634.8
10°	795.4	773.3	728.6	681.2	640.2	595.8	552.7	525.0	499.7	488.9	491.6
12.5°	769.8	741.6	678.8	617.3	556.0	492.4	435.7	380.8	339.4	320.8	322.0
15°	747.8	711.8	632.3	550.3	473.5	386.5	307.8	244.2	207.9	194.5	193.9
17.5°	724.2	680.5	583.7	488.0	388.3	280.7	206.2	168.4	154.1	149.7	149.7
20°	698.8	648.2	532.9	420.1	298.7	196.0	155.0	140.4	135.0	133.7	133.5
22.5°	675.3	616.6	481.9	347.9	216.1	148.7	132.0	126.3	125.5	126.5	126.5
25°	656.8	588.8	430.1	271.6	157.3	124.5	117.4	116.7	120.1	124.1	124.8
27.5°	642.8	564.0	378.9	198.4	123.6	108.4	105.9	108.9	116.7	124.8	126.3
30°	633.2	542.8	317.8	142.7	103.0	95.0	96.1	101.2	113.1	125.5	128.7
32.5°	629.0	525.5	256.2	109.6	88.0	83.5	86.4	93.2	105.6	117.8	121.9
35°	633.0	512.9	199.3	91.0	77.1	73.8	77.1	84.0	92.0	98.2	100.6
37.5°	647.6	508.5	150.0	80.7	69.9	66.6	69.2	73.9	77.6	79.7	80.8
40°	678.3	513.2	117.6	75.3	65.8	62.1	62.7	64.9	67.5	69.2	69.3
42.5°	727.1	528.7	104.7	73.2	63.4	58.5	57.3	58.8	61.7	64.0	64.5
45°	792.0	554.3	103.2	73.9	62.3	55.5	53.3	54.8	58.5	62.5	63.2
47.5°	876.0	595.1	109.6	77.6	62.9	54.0	50.7	52.2	57.0	62.3	63.2
50°	975.5	651.6	121.2	82.9	66.0	54.0	49.4	50.8	55.8	61.9	62.7
52.5°	1092.7	730.2	133.3	88.3	70.5	56.1	49.9	49.8	54.2	59.7	60.9
55°	1221.9	827.9	144.9	93.0	73.0	58.7	51.1	48.4	51.9	56.5	57.3
57.5°	1374.0	961.6	165.3	97.5	74.4	60.6	52.5	47.0	49.0	52.2	52.9
60°	1580.3	1158.0	205.0	105.0	76.8	61.7	52.6	45.8	45.5	47.7	47.9
62.5°	1849.3	1388.2	242.8	114.1	81.7	61.9	51.7	44.7	42.6	43.2	43.2
65°	2040.6	1472.9	231.9	121.6	86.2	61.7	50.8	44.1	40.3	39.2	39.2
67.5°	1931.7	1300.9	196.9	123.6	86.6	59.2	48.9	42.6	38.3	35.7	35.7
69°	1771.7	1140.4	180.7	120.1	83.2	56.2	46.6	41.1	37.0	33.9	33.9
70°	1641.5	1018.7	170.9	115.8	78.8	53.8	44.6	39.4	35.7	32.9	32.7
72.5°	1225.5	679.7	146.1	99.9	64.8	45.5	38.9	35.2	32.0	30.3	30.3
75°	646.7	340.6	119.7	81.6	49.9	36.3	32.0	29.6	27.8	27.6	27.3
77.5°	211.9	154.1	86.0	61.4	36.7	28.2	25.5	24.0	23.7	24.7	24.7
80°	114.4	92.0	55.3	41.4	25.5	21.1	19.8	19.6	20.1	21.5	21.5
82.5°	55.5	45.5	32.9	25.5	17.4	15.5	15.5	15.7	16.6	18.1	18.1
85°	24.0	21.5	19.0	14.4	10.8	9.6	11.0	12.0	12.8	13.8	14.4
87.5°	11.4	10.2	8.8	5.6	4.8	4.9	5.7	7.1	8.5	9.4	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)