

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: P197082

Luminaire Tested: **NAV-AF-06-D-UNV-SL3-8030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P197082
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24263)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-AF-06-D-UNV-SL3-8030-HSS
Description: NAVION ROADWAY AND AREA LUMINAIRE
(6) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24952 lumens
Efficiency: N/A
Efficacy: 74.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G4

Input Watts (W): 333
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

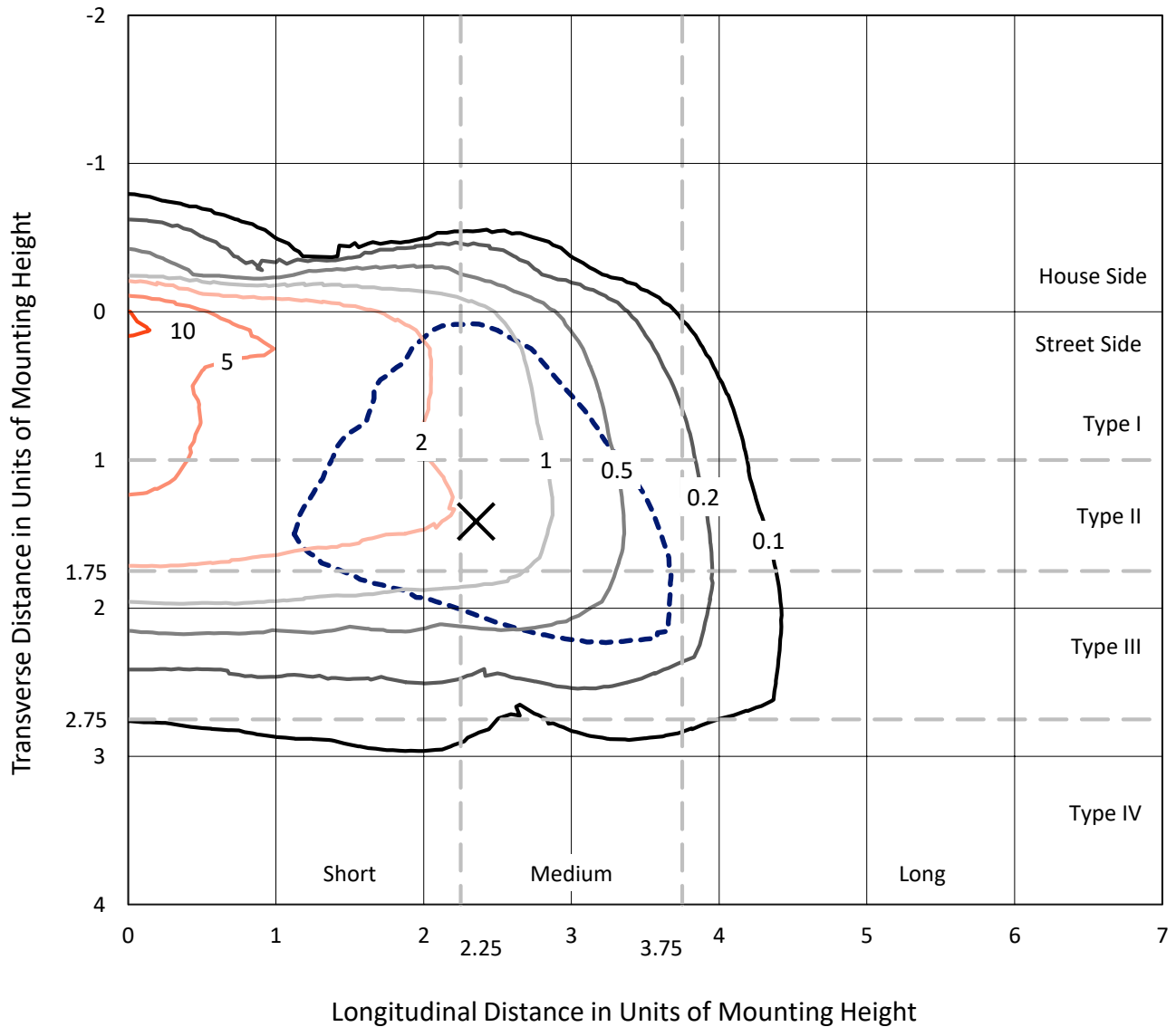


REPORT NUMBER: P197082

CATALOG NUMBER: NAV-AF-06-D-UNV-SL3-8030-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

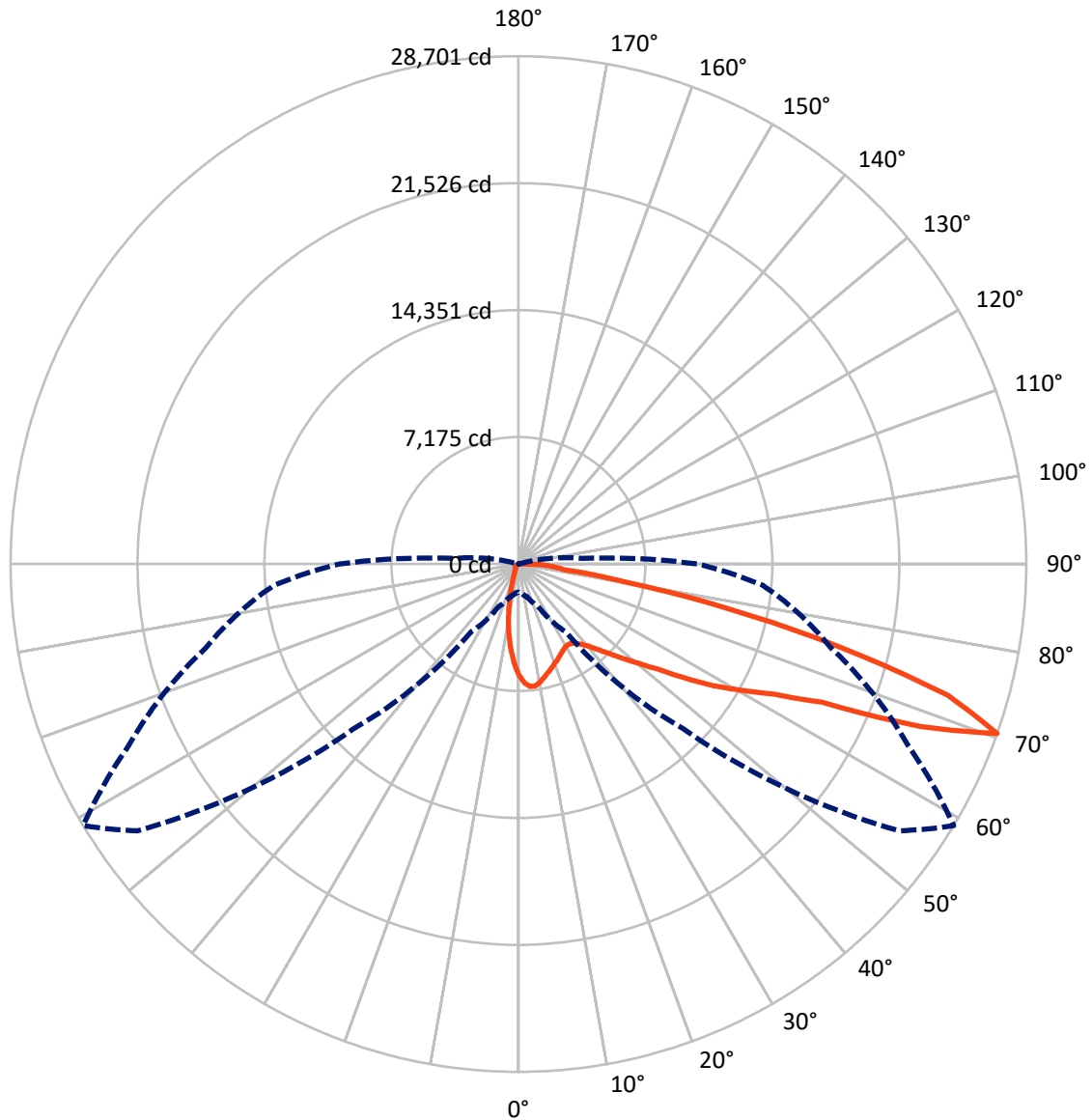


Based on 25 foot mounting height. Maximum calculated value = 10.7 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P197082

CATALOG NUMBER: NAV-AF-06-D-UNV-SL3-8030-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P197082

CATALOG NUMBER: NAV-AF-06-D-UNV-SL3-8030-HSS

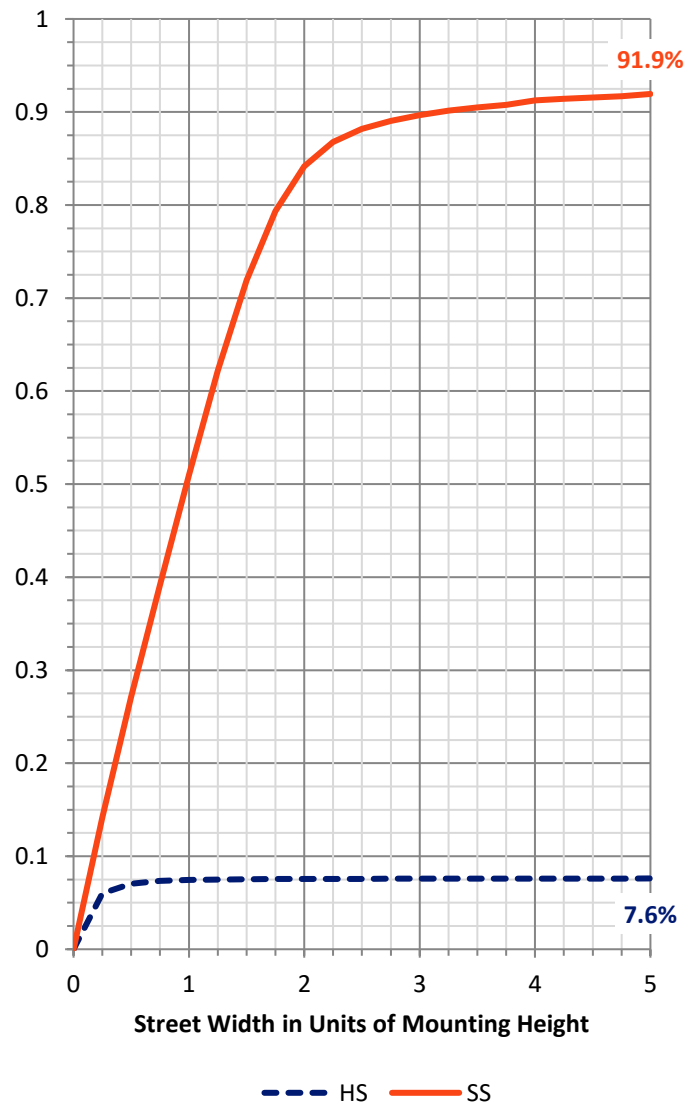
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1918.1	0.0	1918.1
	% Fixture	7.7	0.0	7.7
Street Side	Lumens	23033.9	0.0	23033.9
	% Fixture	92.3	0.0	92.3
Total	Lumens	24952.0	0.0	24952.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	518.8	2.1
10°-20°	1088.2	4.4
20°-30°	1473.1	5.9
30°-40°	2125.9	8.5
40°-50°	3530.6	14.1
50°-60°	5400.4	21.6
60°-70°	6716.9	26.9
70°-80°	3713.1	14.9
80°-90°	385.0	1.5
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°	24952.0	100.0
0°-180°	24952.0	100.0



REPORT NUMBER: P197082

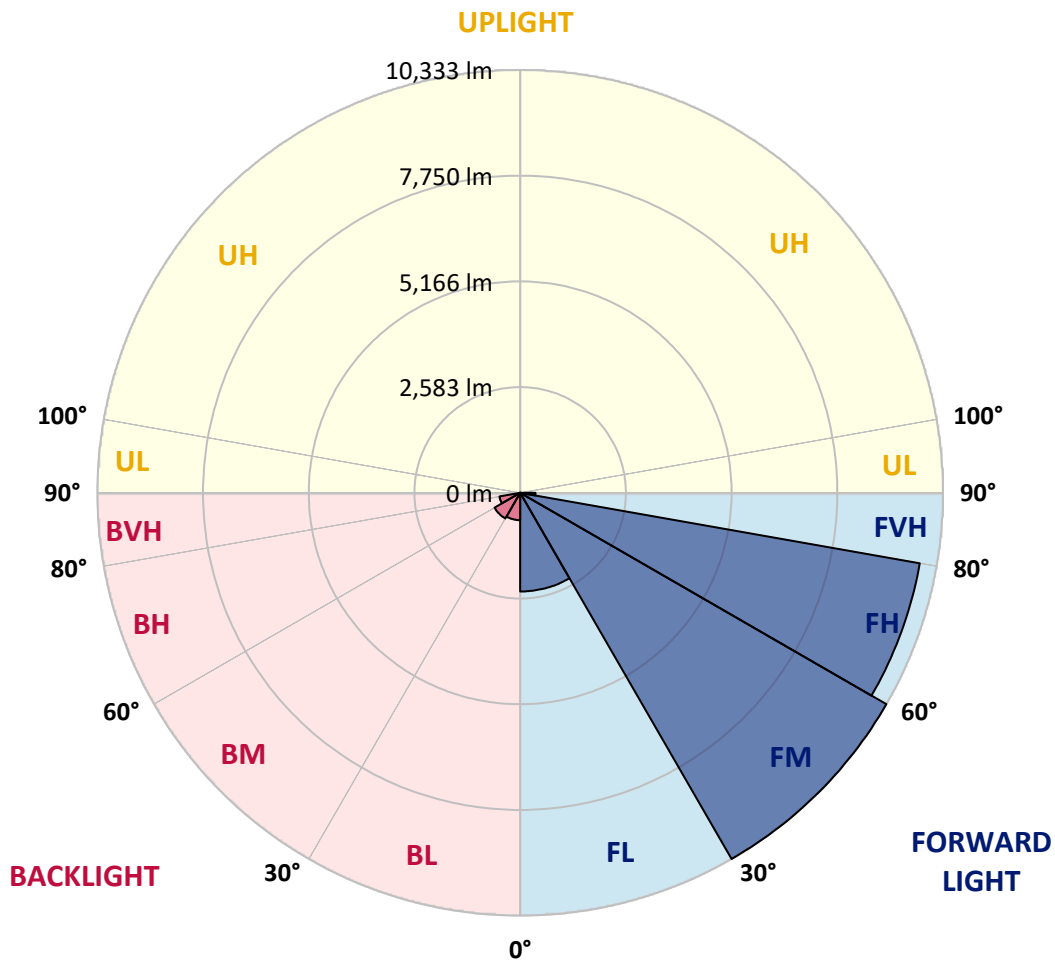
CATALOG NUMBER: NAV-AF-06-D-UNV-SL3-8030-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2411.7	9.7			
FM	(30°-60°)	10332.9	41.4			
FH	(60°-80°)	9915.4	39.7			G4/12000
FVH	(80°-90°)	373.9	1.5			G3/500
BL	(0°-30°)	668.4	2.7	B2/1000		
BM	(30°-60°)	724.0	2.9	B1/1000		
BH	(60°-80°)	514.6	2.1	B2/1000		G2/1000
BVH	(80°-90°)	11.1	0.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Medium





REPORT NUMBER: P197082

CATALOG NUMBER: NAV-AF-06-D-UNV-SL3-8030-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	6309.5	6309.5	6309.5	6309.5	6309.5	6309.5	6309.5	6309.5	6309.5	6309.5	6309.5
2.5°	7132.0	7120.7	7073.7	7064.3	7011.6	6906.2	6783.8	6734.9	6635.1	6477.0	6301.9
5°	7250.6	7256.3	7260.0	7239.3	7231.8	7145.2	7009.7	6951.3	6817.7	6557.9	6237.9
7.5°	6806.4	6821.4	6868.5	6889.2	6979.6	7013.4	6985.2	6947.6	6842.2	6535.3	6085.5
10°	6337.7	6365.9	6416.8	6450.6	6561.7	6652.0	6766.9	6776.3	6753.7	6460.0	5914.2
12.5°	5934.9	5961.2	6017.7	6085.5	6198.4	6315.1	6486.4	6546.6	6621.9	6411.1	5791.8
15°	5588.5	5596.1	5650.7	5735.4	5884.1	6044.1	6247.3	6335.8	6482.6	6392.3	5697.7
17.5°	5285.5	5287.4	5323.1	5400.3	5581.0	5791.8	6029.0	6145.7	6332.1	6365.9	5614.9
20°	5086.0	5084.1	5086.0	5127.4	5287.4	5537.7	5825.7	5948.1	6187.1	6333.9	5530.2
22.5°	5018.2	5008.8	4965.5	4950.4	5052.1	5272.3	5616.8	5776.8	6057.2	6324.5	5468.1
25°	5101.0	5095.4	5003.1	4916.6	4926.0	5063.4	5404.1	5599.8	5955.6	6358.4	5453.0
27.5°	5368.3	5357.0	5215.8	5046.4	4939.1	4963.6	5246.0	5451.1	5874.7	6441.2	5473.7
30°	5718.4	5720.3	5569.7	5364.5	5112.3	4973.0	5161.3	5355.1	5820.1	6565.5	5518.9
32.5°	6108.1	6106.2	5998.9	5761.7	5439.8	5146.2	5198.9	5362.7	5827.6	6748.0	5605.5
35°	6510.9	6490.2	6454.4	6245.5	5869.0	5449.3	5370.2	5490.7	5906.7	6989.0	5752.3
37.5°	6975.8	6968.3	7004.0	6783.8	6399.8	5895.4	5671.4	5752.3	6106.2	7344.7	5989.5
40°	7715.5	7674.1	7691.1	7391.8	6998.4	6495.8	6093.0	6113.7	6424.3	7815.3	6364.0
42.5°	9125.4	8957.9	8643.5	8082.6	7657.2	7162.1	6644.5	6608.7	6874.2	8385.6	6857.2
45°	10810.0	10618.0	9825.6	8844.9	8316.0	7877.4	7325.9	7229.9	7427.5	9065.1	7493.4
47.5°	12216.1	12009.1	10958.7	9641.1	8986.1	8615.3	8080.7	7967.8	8090.1	9853.8	8257.6
50°	12696.1	12581.3	11659.0	10303.7	9661.8	9443.5	9027.5	8839.3	8869.4	10704.6	9149.9
52.5°	12475.9	12436.3	11818.9	10757.3	10286.8	10358.3	10064.6	9867.0	9833.1	11634.5	10136.2
55°	12010.9	11992.1	11691.0	11009.6	10838.3	11195.9	11519.7	11348.4	11028.4	12622.7	10951.2
57.5°	11346.5	11418.0	11634.5	11495.2	11515.9	12080.6	12871.2	12959.6	12481.5	13409.5	11555.4
60°	9571.5	9763.5	10755.5	12016.6	12982.2	13552.5	14318.6	14484.3	13712.5	13947.8	12253.8
62.5°	7075.6	7350.4	8764.0	11081.1	13789.7	16351.5	16244.2	16170.8	14887.1	14668.7	13524.3
65°	4156.1	4478.0	5673.2	8658.6	12571.9	18151.0	19839.4	18823.0	16677.2	16167.1	15547.8
67.5°	2070.5	2072.4	2612.6	4570.2	9291.0	16895.5	25087.3	24500.0	20483.2	18375.0	16345.9
70°	1592.4	1635.7	1933.1	2655.9	4698.2	13159.1	26290.1	28701.3	24308.0	18277.1	13868.8
72.5°	1349.6	1377.8	1720.4	2311.5	3512.4	7224.3	22758.9	25369.6	23195.6	15442.4	10222.8
75°	971.3	993.9	1522.8	2096.9	3233.8	3583.9	15611.8	18815.5	17403.7	10862.7	5626.2
77.5°	240.9	239.1	530.8	1701.6	2893.1	2985.3	8957.9	12065.5	9985.6	4447.9	1445.6
80°	107.3	103.5	120.5	357.6	2691.7	2817.8	3939.6	6093.0	3830.5	720.9	442.3
82.5°	75.3	71.5	75.3	131.8	899.7	2614.5	2381.1	2640.9	1402.3	246.6	188.2
85°	24.5	22.6	41.4	111.1	252.2	1507.7	2322.8	1972.6	1042.8	105.4	126.1
87.5°	3.8	3.8	15.1	60.2	73.4	502.6	1362.8	1366.5	468.7	62.1	56.5
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: P197082

CATALOG NUMBER: NAV-AF-06-D-UNV-SL3-8030-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6309.5	6309.5	6309.5	6309.5	6309.5	6309.5	6309.5	6309.5	6309.5	6309.5	6309.5
2.5°	6213.5	6102.4	5946.2	5789.9	5648.8	5503.8	5387.1	5332.6	5308.1	5274.2	5200.8
5°	6070.4	5869.0	5526.4	5189.5	4875.2	4574.0	4316.1	4169.3	4011.2	4003.6	3926.5
7.5°	5840.8	5554.7	5014.4	4491.2	4011.2	3551.9	3156.6	2900.6	2725.6	2616.4	2541.1
10°	5584.8	5217.7	4502.5	3766.5	3113.3	2499.7	1991.5	1660.2	1458.8	1357.1	1298.8
12.5°	5381.5	4920.3	3998.0	3071.9	2253.1	1549.1	1076.7	835.7	728.4	687.0	668.2
15°	5206.4	4647.4	3525.5	2450.8	1504.0	890.3	623.0	544.0	527.0	527.0	525.2
17.5°	5029.5	4383.9	3066.3	1840.9	946.8	583.5	491.3	480.0	481.9	487.5	487.5
20°	4862.0	4133.5	2623.9	1312.0	621.2	466.8	446.1	442.3	448.0	455.5	453.6
22.5°	4726.5	3913.3	2209.8	901.6	478.1	423.5	410.3	404.7	408.5	414.1	412.2
25°	4630.5	3725.1	1829.6	628.7	416.0	385.9	370.8	363.3	359.5	363.3	361.4
27.5°	4572.1	3567.0	1472.0	472.5	372.7	348.2	329.4	314.3	304.9	304.9	301.2
30°	4534.5	3418.3	1153.8	391.5	336.9	310.6	284.2	263.5	248.5	244.7	242.8
32.5°	4532.6	3290.3	862.1	346.3	303.0	272.9	240.9	214.6	197.6	193.9	192.0
35°	4579.6	3186.7	634.3	312.5	272.9	237.2	201.4	173.2	158.1	158.1	156.2
37.5°	4702.0	3126.5	480.0	286.1	248.5	207.1	169.4	143.1	129.9	133.6	133.6
40°	4929.7	3115.2	391.5	265.4	227.8	180.7	137.4	116.7	111.1	116.7	116.7
42.5°	5278.0	3175.4	348.2	250.3	208.9	154.3	114.8	99.8	97.9	103.5	103.5
45°	5731.6	3294.0	323.8	237.2	188.2	128.0	96.0	86.6	84.7	92.2	92.2
47.5°	6281.2	3454.0	301.2	222.1	167.5	105.4	80.9	73.4	73.4	80.9	82.8
50°	6932.5	3670.5	278.6	207.1	150.6	88.5	67.8	62.1	64.0	71.5	73.4
52.5°	7681.7	3935.9	257.9	193.9	131.8	71.5	56.5	52.7	54.6	62.1	64.0
55°	8327.3	4167.4	233.4	180.7	107.3	58.4	47.1	45.2	47.1	56.5	56.5
57.5°	8890.1	4389.5	210.8	160.0	84.7	47.1	37.6	37.6	41.4	50.8	52.7
60°	9637.4	4739.6	192.0	135.5	64.0	35.8	30.1	32.0	37.6	45.2	47.1
62.5°	10960.6	5334.4	167.5	112.9	47.1	28.2	24.5	26.4	33.9	43.3	45.2
65°	12617.0	5897.2	139.3	94.1	35.8	20.7	18.8	24.5	33.9	43.3	45.2
67.5°	12447.6	5129.3	109.2	75.3	26.4	16.9	15.1	22.6	32.0	43.3	45.2
70°	10094.8	3595.2	80.9	50.8	20.7	15.1	15.1	22.6	32.0	41.4	43.3
72.5°	7002.1	2000.9	62.1	33.9	18.8	15.1	13.2	20.7	30.1	41.4	43.3
75°	3331.7	613.6	48.9	24.5	16.9	13.2	11.3	20.7	30.1	41.4	43.3
77.5°	640.0	156.2	39.5	20.7	15.1	13.2	11.3	18.8	30.1	39.5	41.4
80°	216.5	69.6	32.0	18.8	15.1	13.2	11.3	18.8	28.2	37.6	39.5
82.5°	118.6	39.5	28.2	16.9	15.1	11.3	9.4	16.9	26.4	37.6	39.5
85°	92.2	28.2	22.6	16.9	15.1	11.3	9.4	16.9	26.4	35.8	37.6
87.5°	47.1	20.7	18.8	16.9	15.1	11.3	9.4	15.1	24.5	33.9	37.6
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)