

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: P197274

Luminaire Tested: **NAV-AF-06-D-UNV-T3-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P197274  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (p24135)  
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-T3-8030  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(6) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29402 lumens  
Efficiency: N/A  
Efficacy: 88.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B3 - 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

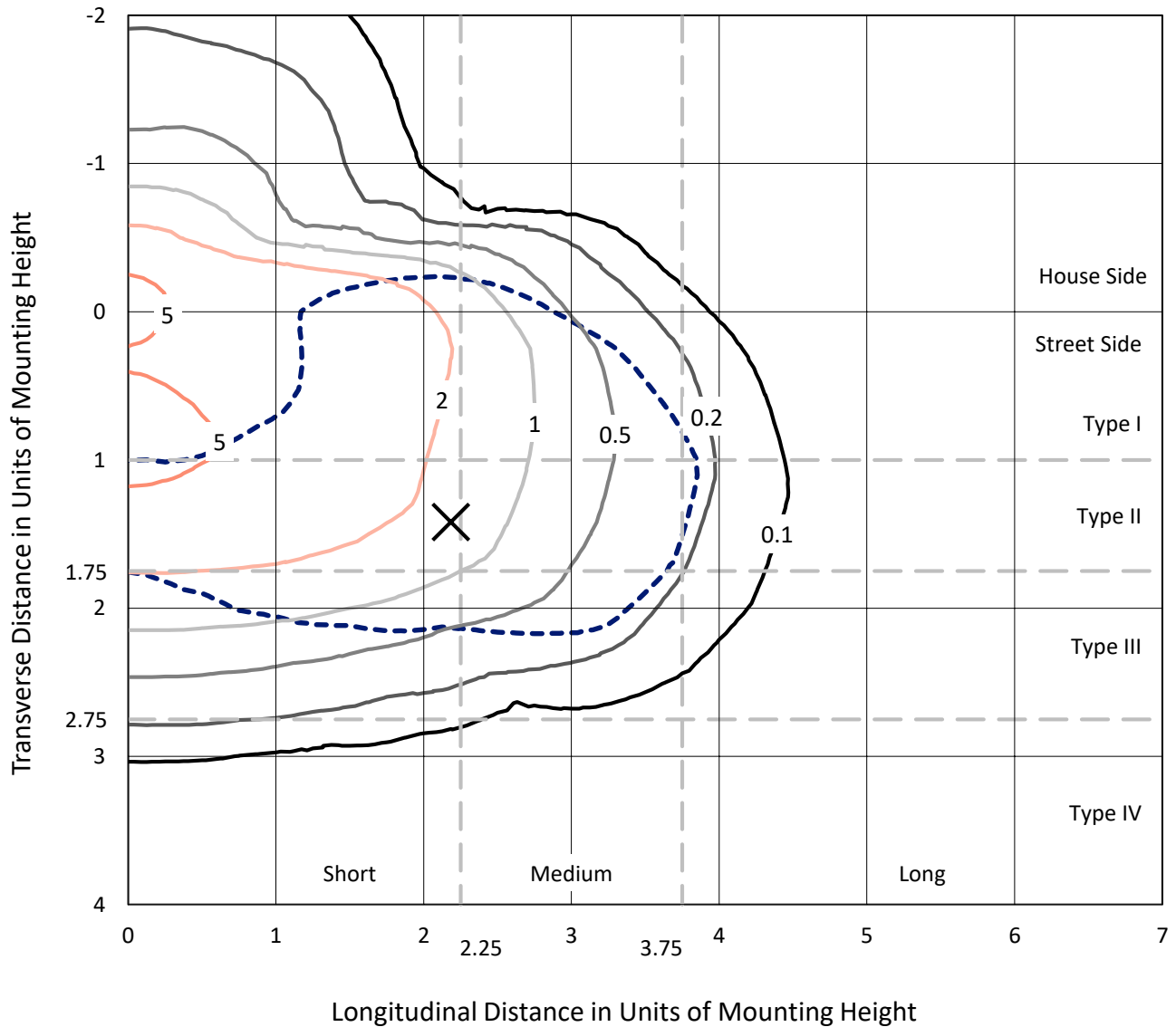


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### Iso-Footcandle Lines of Horizontal Illumination

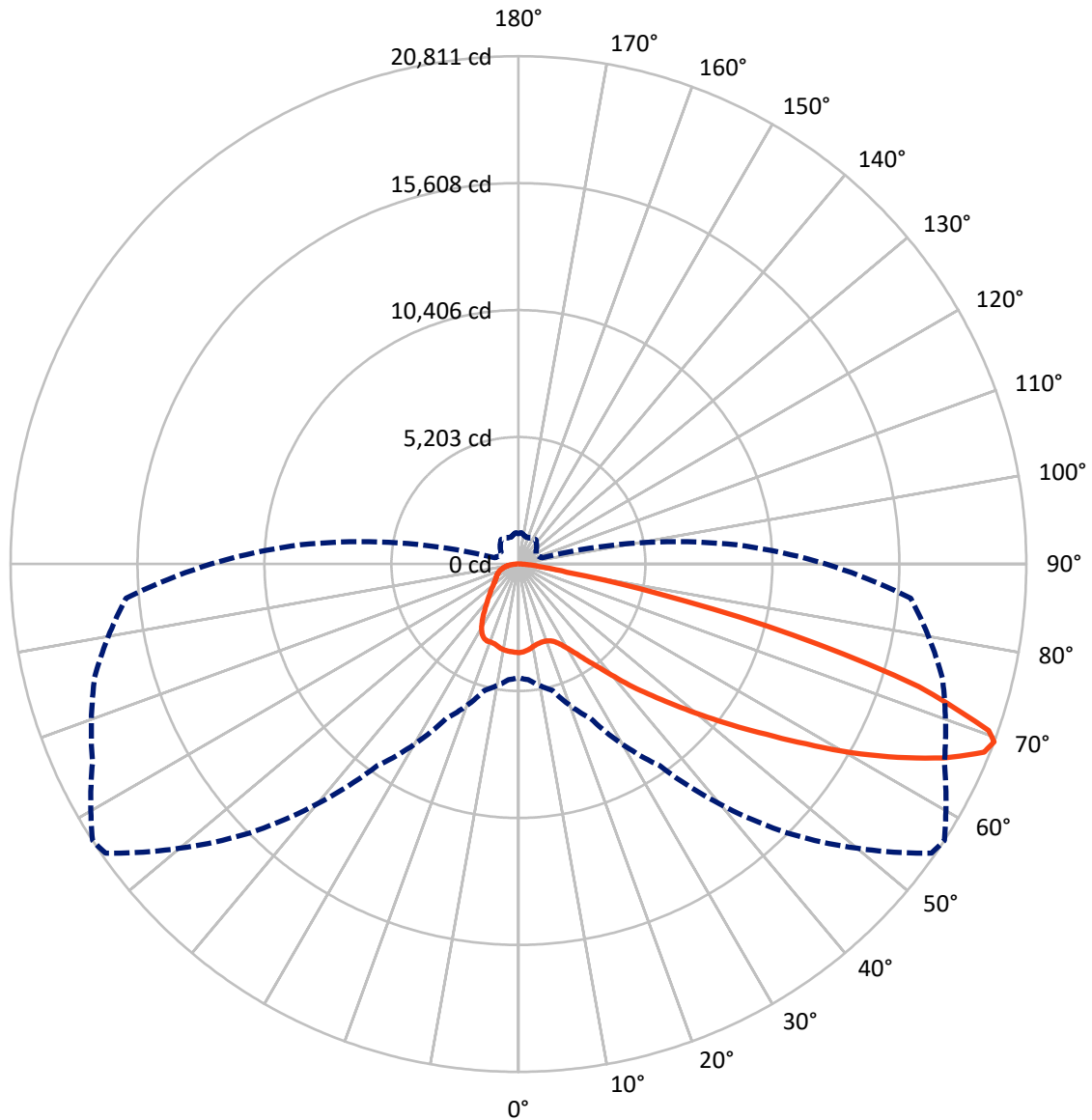
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc  
 Type III - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6488.0	0.0	6488.0
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	22914.0	0.0	22914.0
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	29402.0	0.0	29402.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	340.1	1.2
10°-20°	967.0	3.3
20°-30°	1608.6	5.5
30°-40°	2626.8	8.9
40°-50°	4433.5	15.1
50°-60°	6896.6	23.5
60°-70°	8215.3	27.9
70°-80°	3827.2	13.0
80°-90°	486.8	1.7
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°	29402.0	100.0
0°-180°	29402.0	100.0



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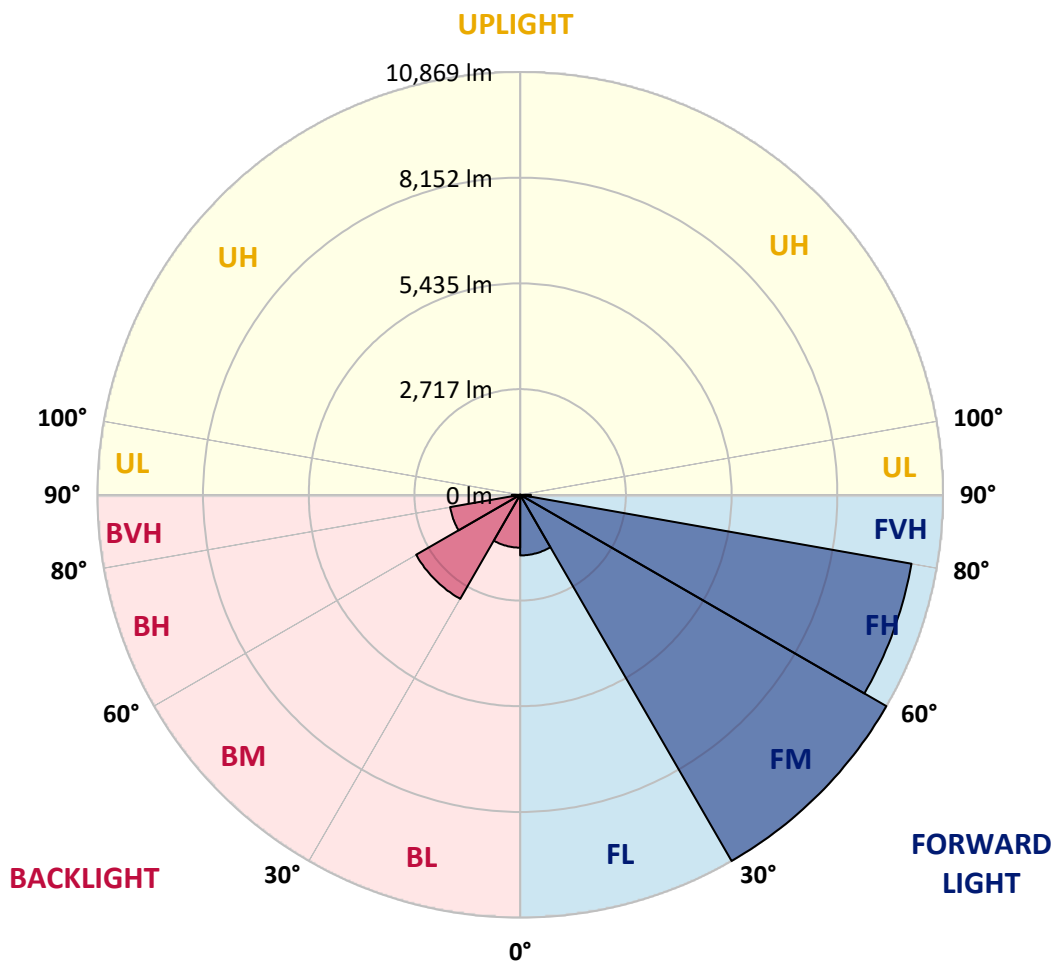
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1557.1	5.3			
FM	(30°-60°)	10869.0	37.0			
FH	(60°-80°)	10214.3	34.7			G4/12000
FVH	(80°-90°)	273.6	0.9			G3/500
BL	(0°-30°)	1358.7	4.6	B3/2500		
BM	(30°-60°)	3087.9	10.5	B3/5000		
BH	(60°-80°)	1828.2	6.2	B3/2500		G3/2500
BVH	(80°-90°)	213.2	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	3632.9	3632.9	3632.9	3632.9	3632.9	3632.9	3632.9	3632.9	3632.9	3632.9	3632.9
2.5°	3612.2	3612.2	3621.6	3621.6	3621.6	3617.8	3606.6	3610.3	3602.8	3597.1	3587.7
5°	3538.8	3542.6	3553.8	3557.6	3563.3	3565.1	3565.1	3563.3	3565.1	3565.1	3559.5
7.5°	3437.1	3440.9	3454.1	3461.6	3478.6	3493.6	3501.1	3501.1	3510.6	3518.1	3520.0
10°	3375.0	3375.0	3382.6	3382.6	3395.7	3403.3	3427.7	3425.8	3452.2	3476.7	3488.0
12.5°	3367.5	3367.5	3363.7	3350.6	3343.0	3341.1	3365.6	3369.4	3408.9	3452.2	3472.9
15°	3392.0	3392.0	3380.7	3354.3	3326.1	3312.9	3337.4	3344.9	3388.2	3439.0	3471.0
17.5°	3471.0	3469.1	3444.7	3392.0	3343.0	3322.3	3329.8	3337.4	3376.9	3435.3	3474.8
20°	3646.1	3646.1	3593.4	3497.4	3412.7	3363.7	3352.4	3358.1	3386.3	3440.9	3491.7
22.5°	3952.9	3958.5	3864.4	3706.3	3561.4	3457.8	3412.7	3418.3	3431.5	3484.2	3540.7
25°	4404.7	4389.6	4256.0	4032.0	3806.1	3629.1	3536.9	3542.6	3542.6	3591.5	3649.8
27.5°	4882.8	4886.5	4694.5	4453.6	4156.2	3892.7	3745.8	3744.0	3742.1	3789.1	3851.3
30°	5423.0	5424.9	5202.8	4924.2	4583.5	4246.5	4026.3	4024.4	4007.5	4065.8	4146.8
32.5°	6014.1	6012.2	5754.3	5439.9	5061.6	4679.5	4393.4	4391.5	4378.3	4457.4	4555.2
35°	6669.1	6669.1	6413.1	6025.3	5616.9	5191.5	4860.2	4858.3	4865.8	4973.1	5065.4
37.5°	7457.8	7474.7	7166.0	6695.5	6249.3	5795.7	5409.8	5398.5	5342.1	5522.8	5675.2
40°	8280.4	8327.4	8007.4	7457.8	6975.9	6507.2	6081.8	6074.3	6025.3	6217.3	6463.9
42.5°	9170.7	9278.0	8922.3	8361.3	7836.2	7329.8	6902.5	6881.8	6693.6	6992.9	7378.7
45°	10337.8	10407.4	9891.7	9383.4	8888.4	8310.5	7802.3	7691.2	7503.0	7887.0	8387.7
47.5°	11132.1	11098.2	10776.4	10435.7	10117.5	9564.1	8783.0	8641.8	8412.1	8920.4	9471.9
50°	11625.3	11649.8	11469.1	11452.1	11435.2	11049.3	9889.8	9720.4	9455.0	10057.3	10701.1
52.5°	11950.9	11839.9	11871.9	12255.9	12720.8	12536.3	11141.5	10953.3	10680.4	11282.7	12009.3
55°	11815.4	11668.6	11964.1	12720.8	13814.4	13855.9	12515.6	12321.8	12088.3	12585.3	13582.9
57.5°	11254.5	11327.9	11794.7	12846.9	14561.7	15038.0	14094.9	13897.3	13438.0	13942.4	15077.5
60°	10465.8	10614.5	11327.9	12647.4	15085.0	15958.4	15828.5	15696.8	14906.2	15263.8	16647.4
62.5°	9618.7	9765.5	10642.7	12306.7	14849.7	16773.5	17530.2	17449.2	16526.9	16536.3	17643.1
65°	8367.0	8427.2	9323.2	11376.8	14196.6	17509.5	19233.7	19162.2	18076.0	17622.4	17921.7
67.5°	6319.0	6394.3	7130.3	8980.6	12208.8	17110.4	20594.6	20583.3	19007.8	18025.2	17259.1
69°	4666.3	4758.5	5359.0	6972.2	10095.0	15589.5	20658.6	20811.1	19260.0	17983.8	16139.1
70°	3414.6	3520.0	4075.3	5534.1	8408.4	13910.4	20110.9	20438.4	19164.0	17722.2	15265.7
72.5°	1451.3	1487.0	1760.0	2497.9	4265.4	8387.7	16472.3	17161.2	17308.1	15879.4	11926.5
75°	909.2	920.5	1027.8	1281.9	1897.4	3469.1	10667.2	11606.5	12922.2	12319.9	7984.9
77.5°	685.2	694.6	756.7	882.8	1178.3	1295.0	4948.7	5901.1	7401.3	7247.0	3973.6
80°	525.2	530.8	572.2	641.9	830.1	811.3	1605.6	2017.9	3088.9	2725.6	1406.1
82.5°	412.2	414.1	449.9	463.1	579.8	545.9	805.6	897.9	1248.0	1037.2	687.1
85°	365.2	370.8	406.6	338.8	370.8	329.4	442.3	480.0	662.6	624.9	259.8
87.5°	186.4	195.8	340.7	289.9	186.4	156.2	193.9	208.9	269.2	291.8	126.1
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°	3632.9	3632.9	3632.9	3632.9	3632.9	3632.9	3632.9	3632.9	3632.9	3632.9	3632.9
2.5°	3589.6	3591.5	3597.1	3606.6	3621.6	3640.4	3663.0	3685.6	3698.8	3708.2	3704.4
5°	3559.5	3561.4	3572.7	3589.6	3608.4	3636.7	3674.3	3702.6	3723.3	3736.4	3734.5
7.5°	3521.8	3527.5	3550.1	3568.9	3595.3	3617.8	3648.0	3674.3	3695.0	3708.2	3706.3
10°	3493.6	3499.3	3527.5	3552.0	3574.6	3578.3	3572.7	3565.1	3563.3	3572.7	3568.9
12.5°	3480.4	3491.7	3518.1	3535.0	3525.6	3489.8	3448.4	3431.5	3425.8	3444.7	3446.6
15°	3484.2	3493.6	3516.2	3504.9	3454.1	3393.8	3371.3	3384.4	3395.7	3407.0	3408.9
17.5°	3493.6	3499.3	3504.9	3463.5	3392.0	3352.4	3344.9	3331.7	3297.8	3279.0	3277.1
20°	3510.6	3518.1	3508.7	3442.8	3378.8	3326.1	3235.7	3154.8	3077.6	3036.2	3019.3
22.5°	3568.9	3574.6	3546.3	3482.3	3384.4	3213.1	3030.6	2891.3	2772.7	2708.7	2684.2
25°	3683.7	3693.1	3653.6	3572.7	3316.7	3017.4	2759.5	2571.3	2422.6	2345.4	2324.7
27.5°	3885.1	3894.5	3851.3	3640.4	3158.6	2755.7	2443.3	2256.9	2128.9	2063.0	2053.6
30°	4186.3	4199.5	4160.0	3638.6	2917.6	2422.6	2134.6	2025.4	1952.0	1906.8	1904.9
32.5°	4604.2	4653.1	4491.2	3574.6	2620.2	2085.6	1901.2	1863.5	1827.7	1797.6	1797.6
35°	5135.0	5249.8	4818.8	3440.9	2292.7	1856.0	1771.3	1735.5	1690.3	1658.3	1654.6
37.5°	5769.4	5948.2	5052.2	3203.7	2010.3	1744.9	1692.2	1633.9	1562.3	1500.2	1485.2
40°	6640.9	6682.3	5167.0	2817.9	1799.5	1684.7	1618.8	1545.4	1455.0	1385.4	1377.9
42.5°	7516.2	7380.6	5144.4	2403.7	1679.0	1630.1	1543.5	1462.6	1381.6	1323.3	1323.3
45°	8511.9	7990.5	4973.1	1987.7	1569.9	1568.0	1473.9	1396.7	1334.6	1291.3	1281.9
47.5°	9464.4	8538.3	4677.6	1680.9	1456.9	1505.9	1428.7	1366.6	1310.1	1268.7	1261.2
50°	10620.1	9172.6	4363.2	1466.3	1347.8	1451.3	1409.9	1377.9	1323.3	1251.8	1244.2
52.5°	11768.3	9914.3	4120.4	1304.5	1251.8	1408.0	1421.2	1424.9	1374.1	1234.8	1225.4
55°	13001.3	10706.7	3864.4	1178.3	1172.7	1387.3	1447.5	1443.7	1419.3	1238.6	1223.5
57.5°	14174.0	11502.9	3482.3	1089.9	1110.6	1366.6	1453.2	1392.9	1349.6	1257.4	1232.9
60°	15145.3	12161.8	2921.4	1027.8	1057.9	1325.2	1415.5	1325.2	1251.8	1253.6	1231.0
62.5°	15617.7	12346.2	2234.3	956.2	1014.6	1257.4	1360.9	1274.3	1206.6	1261.2	1248.0
65°	15258.2	11821.1	1592.5	890.3	961.9	1178.3	1328.9	1231.0	1184.0	1298.8	1283.8
67.5°	13966.9	10390.5	1155.8	832.0	911.0	1097.4	1268.7	1191.5	1161.4	1327.0	1293.2
69°	12594.7	8971.2	1001.4	798.1	875.3	1054.1	1229.2	1170.8	1144.5	1287.5	1238.6
70°	11454.0	7877.6	924.2	777.4	845.2	1029.6	1199.0	1157.6	1127.5	1240.5	1182.1
72.5°	8212.6	5091.7	777.4	715.3	766.1	975.0	1133.2	1108.7	1063.5	1120.0	1082.3
75°	4961.8	2657.9	660.7	651.3	683.3	899.8	1056.0	1025.9	980.7	986.3	967.5
77.5°	2279.5	1227.3	553.4	576.0	596.7	805.6	961.9	928.0	886.6	871.5	873.4
80°	999.5	717.2	463.1	491.3	502.6	724.7	860.2	822.6	777.4	858.3	796.2
82.5°	540.2	416.0	361.4	380.2	412.2	630.6	747.3	698.3	655.1	762.3	615.5
85°	218.4	212.7	244.7	263.5	286.1	453.6	624.9	574.1	521.4	466.8	455.5
87.5°	94.1	101.6	120.5	128.0	152.5	282.4	419.8	367.1	368.9	316.2	310.6
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)