

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: P968941

Luminaire Tested: **NAV-SB5C-830-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968941
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-830-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26628.5 lumens
Efficiency: N/A
Efficacy: 106.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 249.5
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: 24 FT



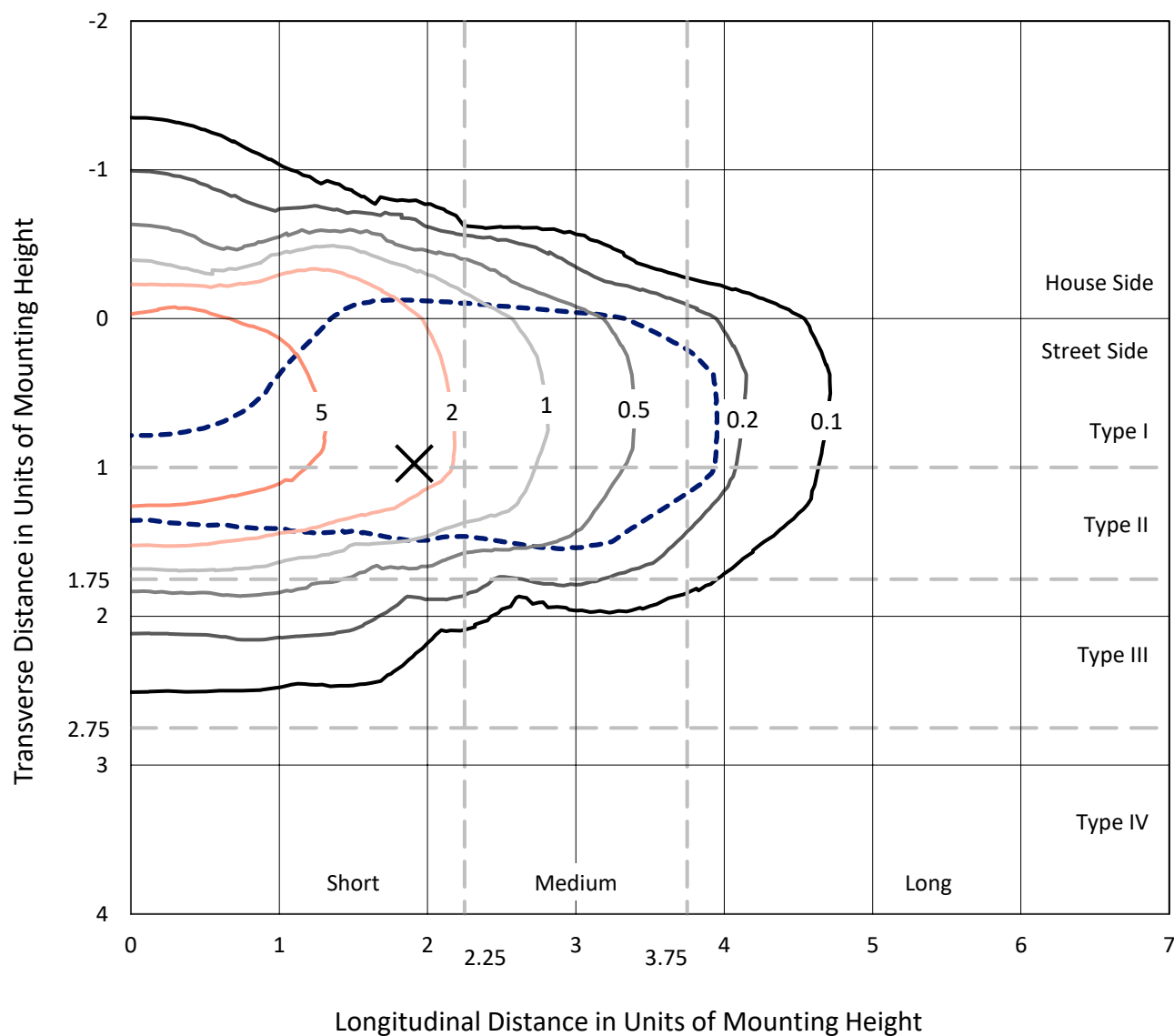
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

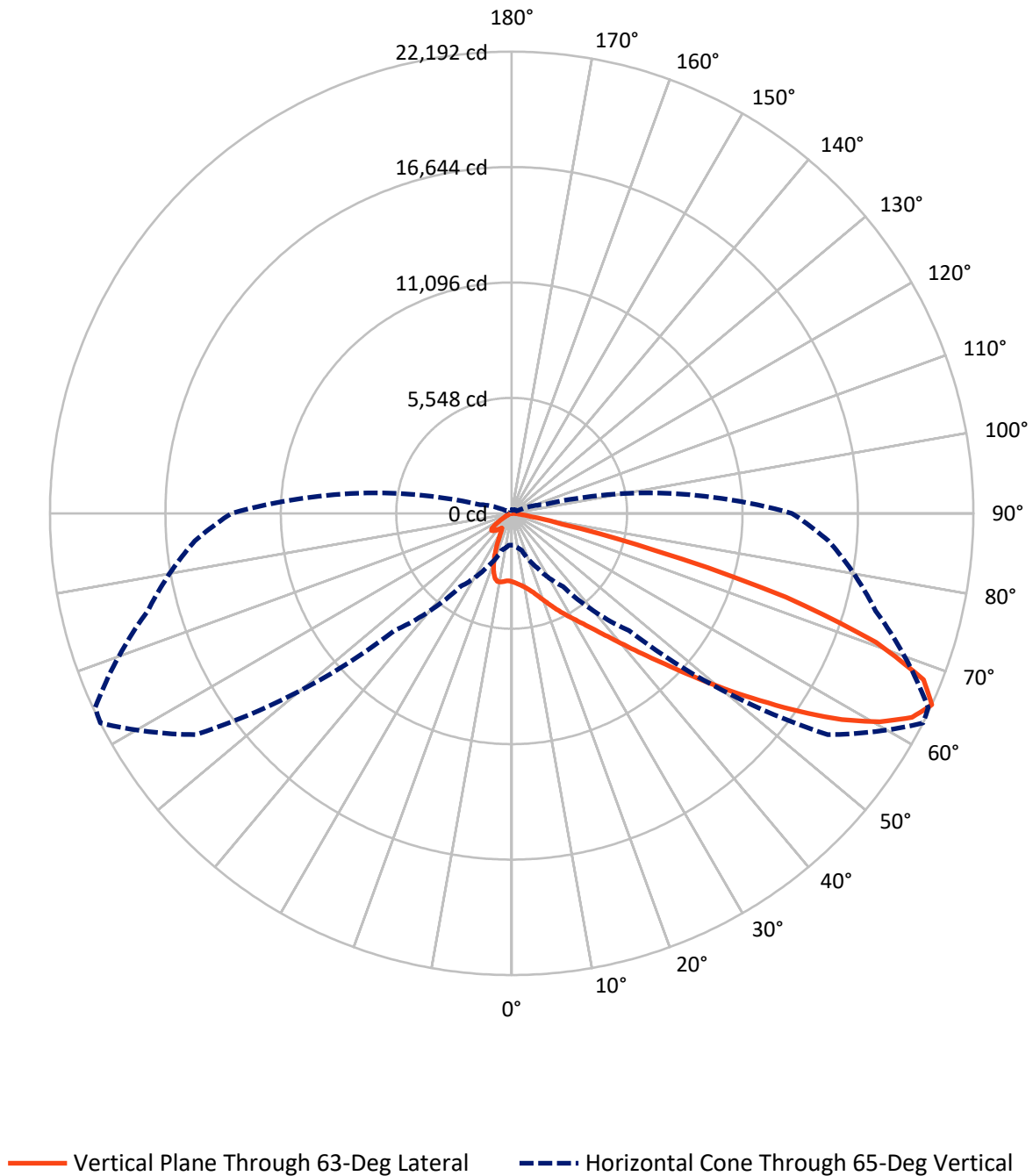


Based on 25 foot mounting height. Maximum calculated value = 9 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3914.2	0.0	3914.2
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	22714.3	0.0	22714.3
	% Fixture	85.3	0.0	85.3
Total	Lumens	26628.5	0.0	26628.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	309.6	1.2
10°-20°	859.2	3.2
20°-30°	1496.0	5.6
30°-40°	2696.4	10.1
40°-50°	5347.8	20.1
50°-60°	7284.6	27.4
60°-70°	5814.5	21.8
70°-80°	2631.2	9.9
80°-90°	189.1	0.7
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°	26628.5	100.0
0°-180°	26628.5	100.0

Coefficient of Utilization



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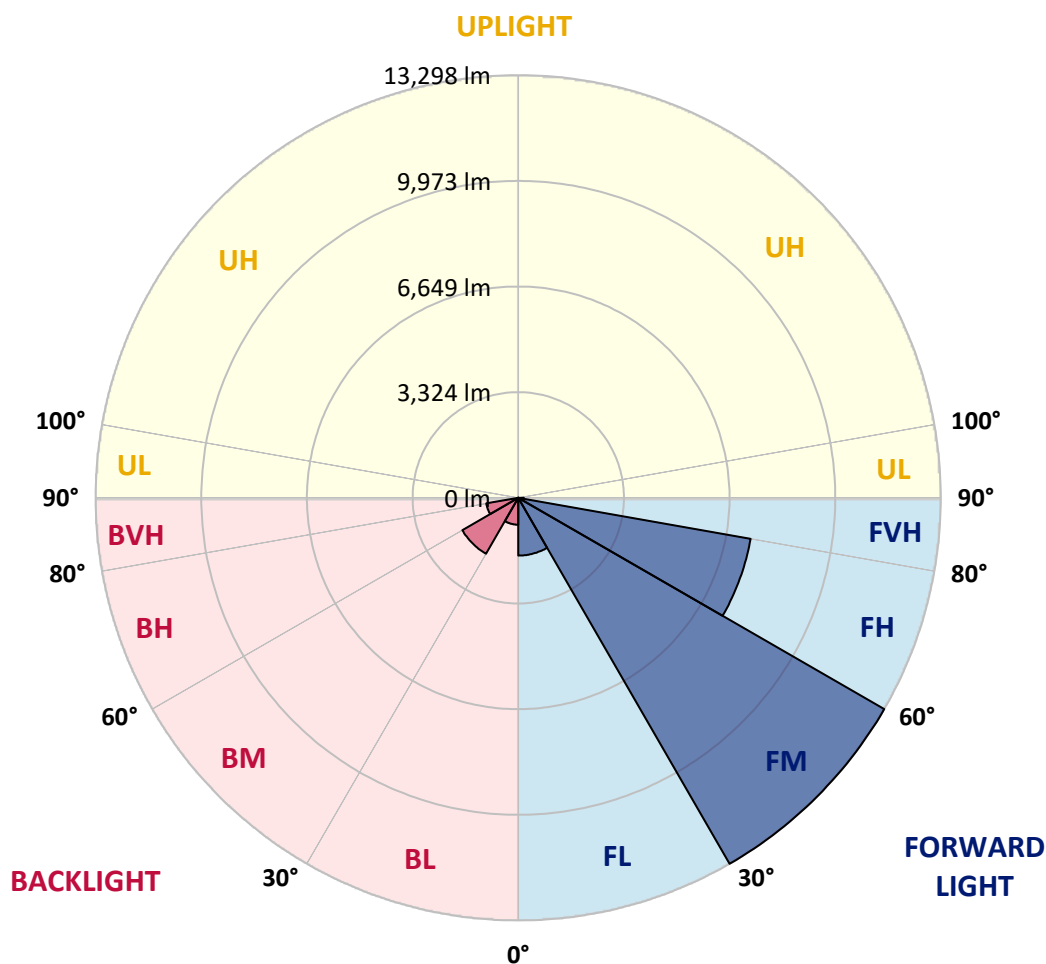
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1817.7	6.8			
FM	(30°-60°)	13297.6	49.9			
FH	(60°-80°)	7423.9	27.9			G3/7500
FVH	(80°-90°)	175.1	0.7			G2/225
BL	(0°-30°)	847.1	3.2	B2/1000		
BM	(30°-60°)	2031.2	7.6	B2/2500		
BH	(60°-80°)	1021.8	3.8	B3/2500		G3/2500
BVH	(80°-90°)	14.0	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5
2.5°	3363.4	3354.2	3367.0	3361.6	3357.9	3350.6	3346.9	3343.2	3336.0	3330.4	3308.4
5°	3372.6	3367.0	3379.8	3390.9	3401.9	3412.8	3418.4	3425.7	3418.4	3403.7	3381.7
7.5°	3295.6	3292.0	3319.5	3352.4	3401.9	3444.0	3489.8	3515.4	3517.3	3511.8	3488.0
10°	3290.1	3280.9	3308.4	3348.8	3412.8	3488.0	3568.5	3623.6	3630.9	3654.6	3629.0
12.5°	3376.2	3367.0	3405.6	3449.5	3515.4	3594.3	3693.2	3770.1	3781.1	3814.0	3795.8
15°	3521.0	3508.2	3552.0	3608.9	3693.2	3782.9	3887.3	3956.9	3966.1	4006.4	3973.4
17.5°	3689.5	3676.7	3727.9	3788.4	3880.0	4002.7	4123.7	4200.6	4211.6	4237.2	4176.8
20°	3905.7	3889.2	3929.4	3984.4	4081.6	4228.0	4372.8	4482.7	4480.9	4480.9	4382.0
22.5°	4156.6	4131.0	4165.8	4209.8	4301.3	4479.0	4671.3	4801.4	4801.4	4750.2	4587.1
25°	4426.0	4400.2	4438.8	4479.0	4559.6	4761.1	4986.5	5147.7	5155.0	5067.1	4806.9
27.5°	4763.0	4730.0	4759.3	4806.9	4854.6	5059.7	5327.2	5514.1	5517.8	5382.2	5015.7
30°	5411.5	5318.0	5226.5	5175.1	5197.2	5400.5	5686.3	5893.2	5911.6	5724.7	5243.0
32.5°	6598.5	6580.2	6257.8	5836.5	5616.7	5766.9	6087.5	6336.5	6347.6	6107.6	5537.9
35°	8443.3	8421.3	7902.9	7100.5	6384.2	6257.8	6574.8	6869.7	6862.4	6591.3	5920.7
37.5°	10645.2	10625.2	9941.8	8868.3	7708.7	6999.7	7203.1	7512.7	7558.5	7203.1	6415.4
40°	12526.6	12451.5	12019.2	10984.2	9467.3	8230.8	8097.1	8302.2	8349.9	7928.6	7043.7
42.5°	13951.9	13887.7	13668.0	13021.3	11596.0	10051.8	9150.4	9229.2	9282.3	8776.7	7765.5
45°	14690.1	14675.4	14763.4	14702.9	13765.0	12286.7	10656.2	10328.3	10348.5	9716.5	8584.4
47.5°	14794.5	14787.3	15188.4	15756.3	15629.9	14807.4	12588.9	11698.6	11627.2	10777.2	9474.7
50°	14179.0	14164.4	14933.7	15998.1	16875.6	16925.1	14783.6	13242.9	13085.4	11874.5	10403.4
52.5°	12213.4	12209.7	13473.7	15245.2	17313.5	18778.9	16952.6	14939.3	14675.4	13035.9	11385.4
55°	9397.7	9465.5	10914.5	13008.5	16514.7	19671.1	18899.9	16822.5	16417.6	14204.7	12290.4
57.5°	6657.2	6756.1	8188.6	10053.5	14038.0	19143.5	20217.0	18709.3	18273.4	15369.8	13208.2
60°	3575.9	3663.9	5098.2	7324.0	10443.7	17176.0	20911.3	20347.1	19934.9	16476.3	14036.1
62.5°	2130.6	2159.8	2753.4	4728.2	7063.9	13122.0	20616.3	21594.6	21255.7	17405.0	14756.1
65°	1529.6	1535.1	1833.7	2887.1	4288.5	7972.4	18548.2	22191.9	22087.4	18104.8	15289.2
67.5°	1287.8	1284.2	1408.8	1918.0	2921.9	3993.6	14215.6	21347.3	21790.7	18548.2	15591.5
70°	1104.6	1110.2	1256.6	1405.1	2196.5	2260.5	7067.6	18586.6	19531.9	18665.4	15573.1
72.5°	822.6	840.8	976.4	1280.5	1657.8	1555.3	2440.1	13781.5	15490.7	17586.4	14765.2
75°	580.8	589.9	687.0	1077.2	1236.6	1132.1	1245.7	7124.4	9315.3	13482.8	12085.2
77.5°	447.0	463.5	520.3	753.0	1218.2	795.1	762.1	2465.7	3788.4	8144.6	8285.8
80°	241.8	271.1	375.6	544.1	855.5	562.4	377.4	982.0	1284.2	3808.6	3194.8
82.5°	124.5	139.2	262.0	392.1	487.3	491.0	186.9	408.6	529.4	1176.1	437.8
85°	49.5	60.5	175.9	216.2	251.0	241.8	84.3	164.9	190.5	326.1	133.8
87.5°	11.0	18.3	64.2	49.5	47.7	51.2	20.2	38.4	36.6	38.4	23.8
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°	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5
2.5°	3306.6	3299.3	3279.2	3257.1	3231.5	3216.9	3207.6	3205.9	3193.1	3183.9	3193.1
5°	3361.6	3354.2	3315.8	3270.0	3220.5	3182.0	3145.4	3112.4	3064.7	3055.6	3051.9
7.5°	3471.5	3451.4	3389.1	3326.7	3233.4	3121.5	2986.0	2830.3	2691.0	2648.9	2628.8
10°	3607.1	3579.6	3500.8	3390.9	3183.9	2879.7	2551.8	2247.7	2005.9	1938.2	1912.5
12.5°	3760.9	3737.2	3632.7	3429.3	2976.9	2425.5	1923.5	1546.1	1311.7	1253.1	1236.6
15°	3944.1	3909.3	3764.6	3370.7	2606.8	1843.0	1320.8	1097.4	1013.0	1002.0	991.1
17.5°	4138.3	4081.6	3881.9	3160.1	2108.5	1309.8	1020.4	956.2	919.6	908.7	903.1
20°	4316.0	4242.7	3951.5	2841.3	1575.4	1020.4	914.1	872.0	839.1	826.2	818.9
22.5°	4493.7	4389.3	3951.5	2407.1	1181.6	905.0	839.1	800.5	762.1	745.6	736.5
25°	4678.7	4539.5	3881.9	1923.5	950.8	829.8	767.6	725.4	692.5	672.3	665.0
27.5°	4858.2	4665.9	3722.5	1465.5	846.3	763.9	701.6	661.3	630.2	615.5	615.5
30°	5028.6	4790.4	3498.9	1112.0	778.6	699.8	641.1	606.4	575.2	560.6	562.4
32.5°	5259.5	4948.0	3260.8	912.2	720.0	639.3	586.2	553.2	525.7	514.8	514.8
35°	5580.0	5180.7	3055.6	895.8	670.5	589.9	536.8	505.6	478.2	468.9	468.9
37.5°	6034.4	5556.2	2947.6	1005.7	630.2	545.9	496.4	463.5	437.8	430.5	428.7
40°	6594.8	6065.4	3006.2	1115.6	602.7	507.5	459.8	426.8	404.9	395.6	393.9
42.5°	7259.9	6693.9	3330.4	1199.9	584.4	474.5	425.0	388.4	373.7	370.0	370.0
45°	8023.8	7384.4	3826.8	1289.7	555.0	443.3	390.2	362.7	351.7	349.9	348.1
47.5°	8892.1	8142.9	4402.1	1401.4	525.7	414.0	362.7	344.4	335.3	331.6	331.6
50°	9753.1	8906.7	4993.8	1463.7	501.9	386.5	340.7	326.1	318.8	316.9	316.9
52.5°	10654.5	9692.7	5472.0	1405.1	481.7	364.6	322.5	311.4	304.1	302.3	302.3
55°	11513.6	10328.3	5554.4	1192.6	441.5	342.6	302.3	296.7	287.6	287.6	285.8
57.5°	12253.7	10647.1	4971.9	875.7	401.2	309.5	282.1	276.6	269.3	267.4	265.6
60°	12933.3	10555.4	3837.9	589.9	357.2	276.6	256.5	252.8	245.5	236.4	234.5
62.5°	13316.2	10152.5	2625.1	384.7	313.2	241.8	227.1	225.3	208.8	190.5	186.9
65°	13460.9	9324.4	1637.7	280.2	262.0	207.0	196.0	192.4	168.5	148.4	146.6
67.5°	13334.5	7961.5	826.2	221.7	207.0	172.2	161.2	161.2	144.7	126.4	124.5
70°	12828.9	5968.4	348.1	177.7	159.4	131.9	131.9	139.2	122.7	102.6	100.8
72.5°	11731.6	4015.5	185.0	135.6	119.1	93.4	108.0	113.6	97.1	77.0	77.0
75°	9326.3	2449.2	128.2	100.8	75.1	65.9	82.4	86.1	65.9	51.2	49.5
77.5°	6378.8	1406.9	86.1	64.2	47.7	38.4	56.8	53.1	34.8	23.8	25.6
80°	2801.0	586.2	49.5	29.3	18.3	14.7	20.2	14.7	11.0	7.3	7.3
82.5°	327.9	137.4	18.3	11.0	7.3	3.7	1.8	0.0	0.0	0.0	0.0
85°	67.8	16.5	9.1	3.7	1.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.8	3.7	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)