

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: P968784

Luminaire Tested: **NAV-SB5C-735-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968784
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-735-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32831.8 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G4

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

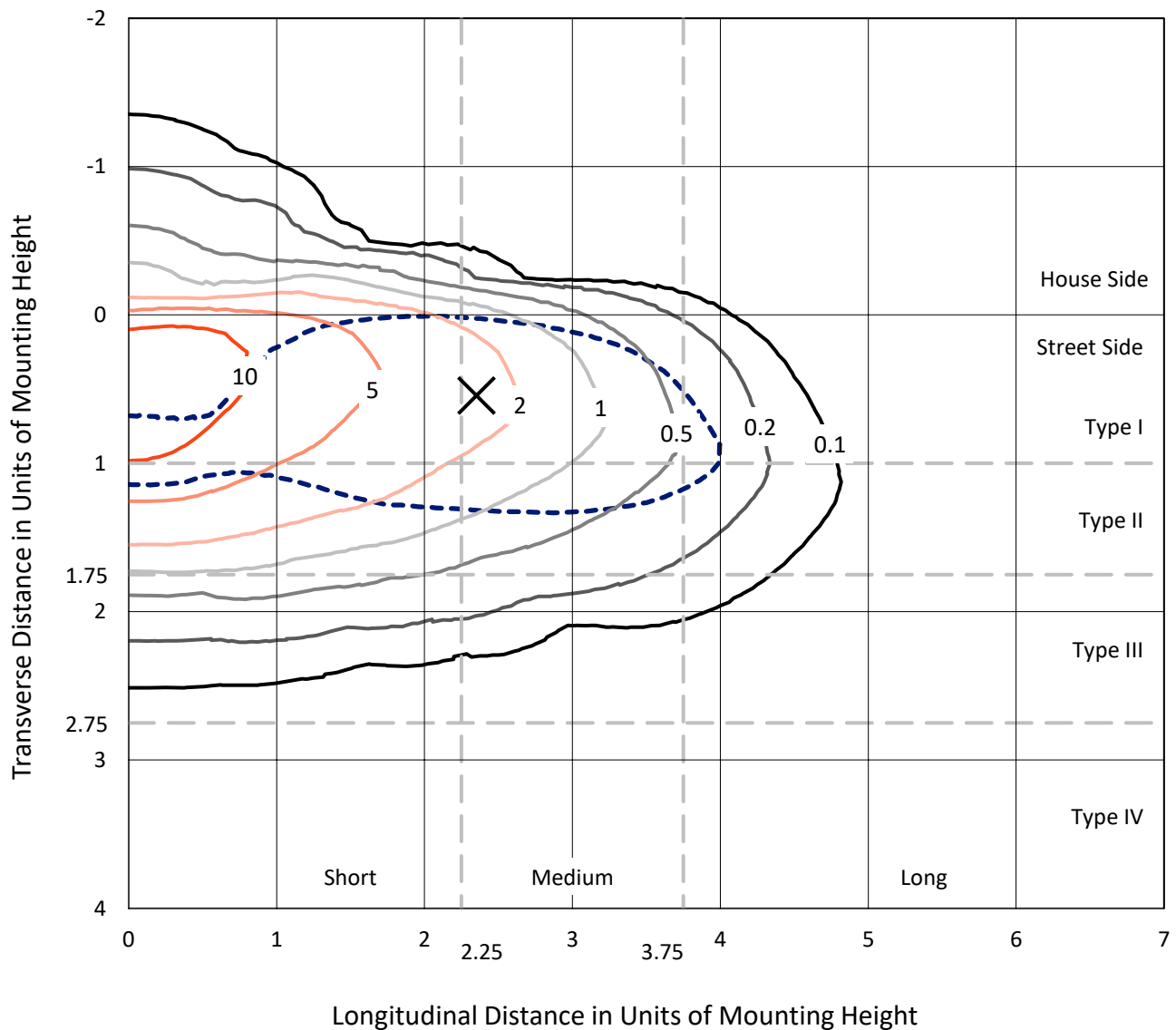


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Iso-Footcandle Lines of Horizontal Illumination

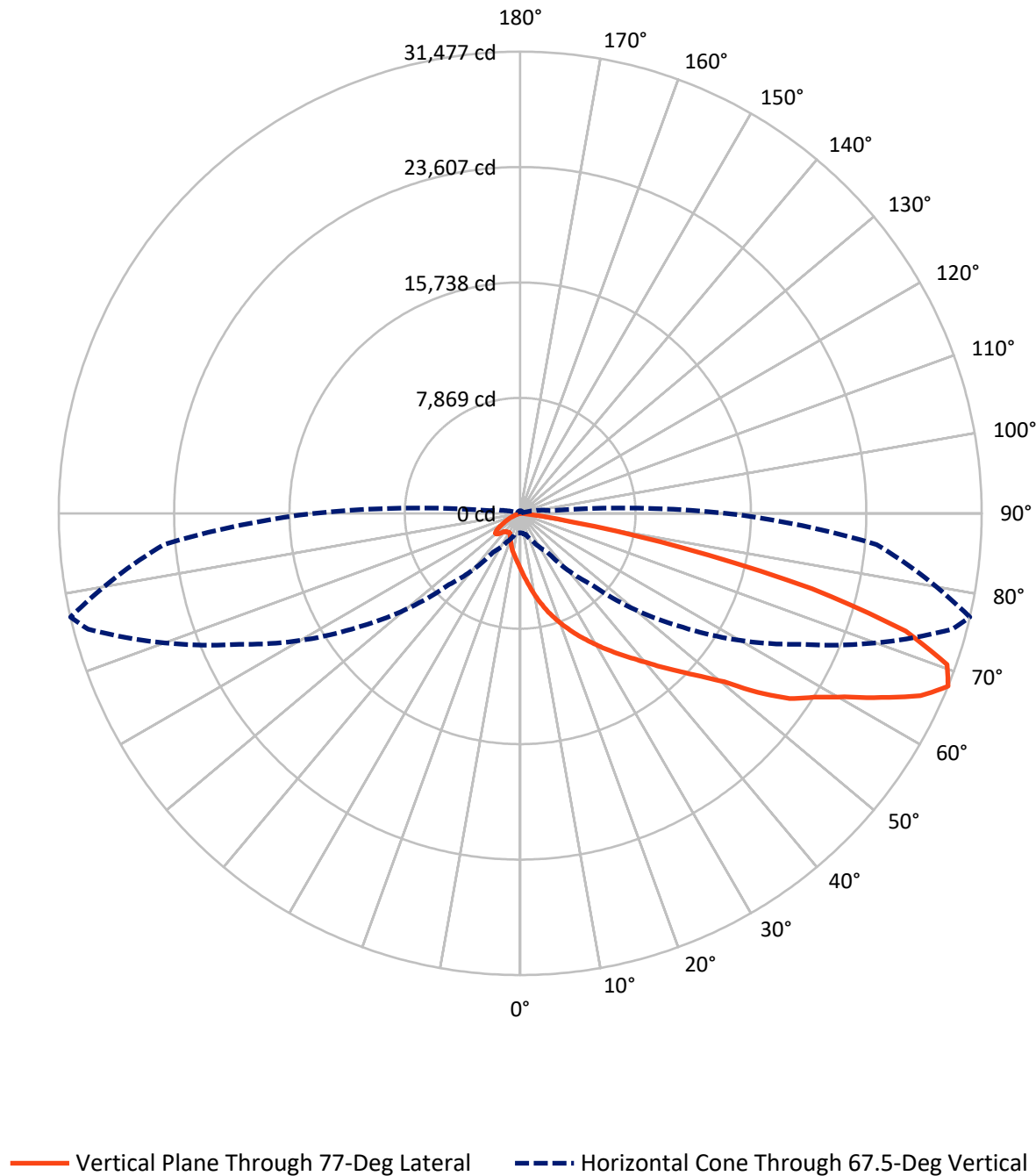
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.2 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2415.4	0.0	2415.4
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	30416.3	0.0	30416.3
	% Fixture	92.6	0.0	92.6
Total	Lumens	32831.8	0.0	32831.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	386.4	1.2
10°-20°	1353.2	4.1
20°-30°	2611.3	8.0
30°-40°	4533.4	13.8
40°-50°	6582.2	20.0
50°-60°	7558.9	23.0
60°-70°	6562.5	20.0
70°-80°	3091.0	9.4
80°-90°	152.9	0.5
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°	32831.8	100.0
0°-180°	32831.8	100.0

Coefficient of Utilization



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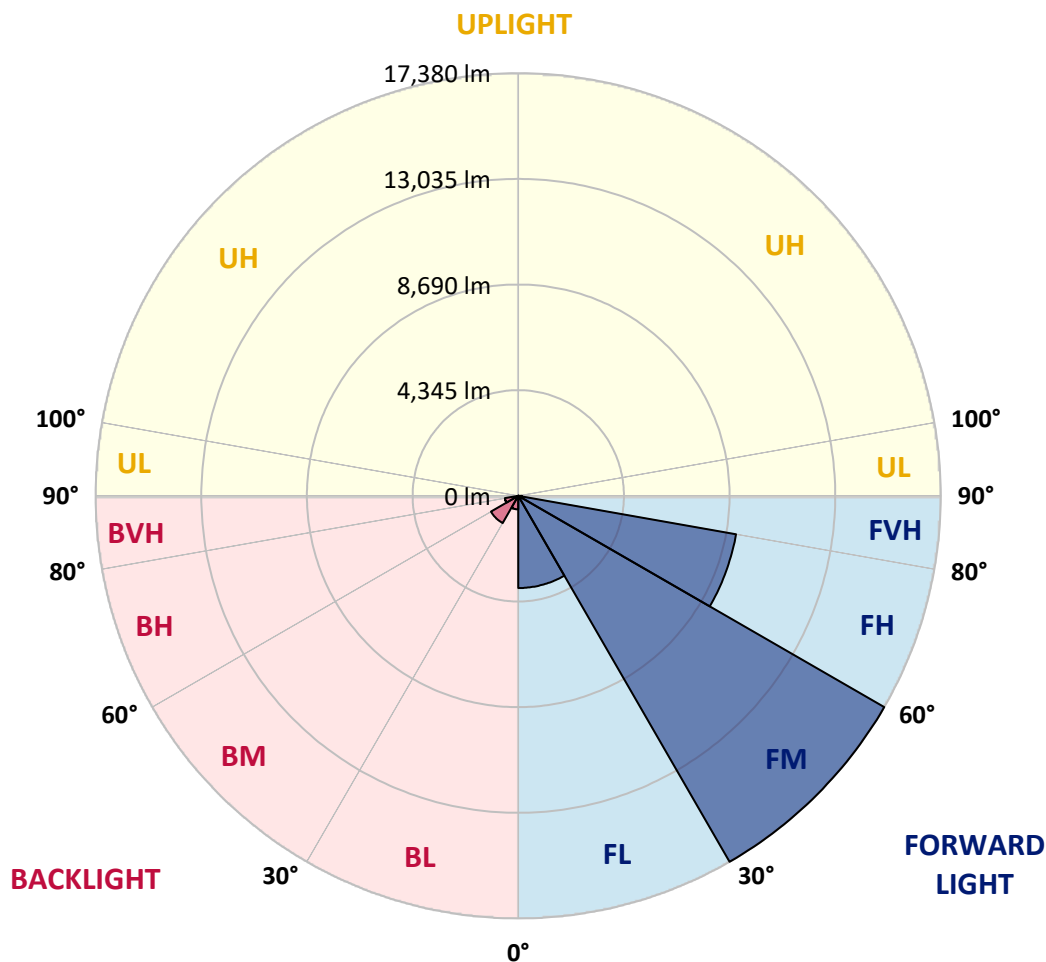
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3791.7	11.5			
FM	(30°-60°)	17380.2	52.9			
FH	(60°-80°)	9094.3	27.7			G4/12000
FVH	(80°-90°)	150.0	0.5			G2/225
BL	(0°-30°)	559.2	1.7	B2/1000		
BM	(30°-60°)	1294.2	3.9	B2/2500		
BH	(60°-80°)	559.2	1.7	B2/1000		G2/1000
BVH	(80°-90°)	2.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9
2.5°	5241.6	5274.2	5227.4	5137.7	5003.1	4915.5	4701.4	4499.5	4275.3	4203.9	3979.7
5°	6389.4	6418.0	6365.0	6267.2	6087.8	5916.5	5635.1	5213.2	4774.8	4634.1	4236.5
7.5°	7239.7	7256.0	7235.6	7145.9	6974.6	6780.9	6466.9	5967.4	5317.1	5162.1	4552.5
10°	7851.3	7904.3	7898.1	7863.5	7749.3	7592.4	7258.0	6689.2	5924.6	5724.8	4909.3
12.5°	8257.0	8316.1	8350.8	8428.3	8422.1	8322.3	8028.6	7427.3	6530.2	6295.8	5310.9
15°	8375.3	8438.4	8570.9	8750.4	8909.4	8960.3	8754.4	8151.0	7196.8	6897.1	5722.8
17.5°	8307.9	8405.8	8564.9	8848.2	9196.9	9427.2	9404.8	8850.3	7802.4	7459.8	6126.5
20°	8456.8	8550.6	8675.0	8913.5	9319.2	9737.1	9904.4	9519.0	8403.8	8044.9	6550.6
22.5°	9280.5	9264.2	9276.4	9315.1	9557.7	9971.6	10316.1	10126.6	8999.1	8632.1	6999.1
25°	10585.3	10511.9	10387.6	10177.5	10116.3	10316.1	10675.0	10664.8	9627.0	9233.6	7457.8
27.5°	12081.7	12069.5	11778.0	11272.3	10986.9	10909.4	11080.7	11188.7	10248.9	9828.9	7918.5
30°	13514.9	13547.6	13154.1	12591.4	12067.4	11763.7	11608.7	11686.2	10880.9	10471.1	8393.6
32.5°	14762.7	14797.3	14369.2	13710.7	13062.4	12695.3	12369.2	12177.5	11570.0	11123.5	8915.6
35°	15816.8	15851.4	15360.0	14632.2	13941.0	13608.7	13239.7	12715.7	12263.2	11847.3	9496.5
37.5°	16758.6	16748.5	16089.9	15355.9	14677.1	14414.1	14220.3	13378.4	12976.7	12575.1	10140.8
40°	17315.2	17358.1	16795.3	15986.0	15327.4	15135.8	15123.6	14200.0	13800.4	13411.0	10846.2
42.5°	17478.3	17553.7	17146.0	16481.4	15884.0	15676.0	15996.1	15088.9	14758.7	14379.4	11643.4
45°	17184.7	17258.1	17072.6	16611.9	16263.3	16128.7	16746.4	16010.4	15782.0	15407.0	12542.5
47.5°	16328.5	16420.2	16465.1	16367.2	16363.1	16499.7	17419.2	16980.9	16997.2	16613.9	13584.3
50°	14670.9	14825.9	15237.8	15584.3	16120.5	16793.3	18073.6	18032.8	18367.3	18036.9	14942.1
52.5°	11657.6	11877.8	13296.8	14244.8	15449.7	16738.2	18793.4	19721.0	20770.9	20287.7	16856.5
55°	9368.1	9368.1	10522.0	12295.8	14140.9	16375.4	19107.3	20817.9	22408.0	22293.9	18204.1
57.5°	7637.2	7728.9	8465.0	10032.8	12246.9	15510.9	19301.0	21507.0	23727.1	23643.6	19521.1
60°	4713.7	4911.4	6301.8	7849.2	10091.8	13971.7	19178.7	22204.2	25327.5	25394.9	21107.3
62.5°	2654.4	2727.8	3347.6	5647.3	7847.2	11902.3	18242.8	22593.6	27374.5	27659.9	22742.4
65°	1832.8	1869.5	2108.1	3514.8	5439.5	9476.2	16414.1	22350.9	29425.5	30002.5	24128.8
67.5°	1331.3	1349.6	1498.4	2146.9	3227.3	6870.7	13547.6	21127.7	30512.2	31476.5	24393.8
70°	1023.5	1035.7	1143.8	1410.8	1906.3	4240.6	9839.1	18695.5	29725.2	30877.1	23036.0
72.5°	831.8	844.1	927.6	1043.9	1264.0	2507.7	5963.3	15182.7	26251.2	27494.8	19610.9
75°	701.3	717.6	793.0	868.5	990.9	1610.6	2797.2	10573.1	19741.4	20556.9	13637.3
77.5°	389.4	358.9	644.2	719.7	835.9	1019.4	1308.9	6222.3	11056.3	11282.5	6051.1
80°	242.6	250.8	511.7	579.0	642.2	513.7	599.4	2395.5	3832.9	3641.2	1172.3
82.5°	14.2	32.6	393.5	418.0	440.3	220.2	226.3	813.4	923.5	848.1	208.0
85°	0.0	0.0	179.4	144.7	152.9	63.2	65.2	189.6	124.3	134.6	40.8
87.5°	0.0	0.0	0.0	4.1	0.0	6.1	12.2	16.3	6.1	8.2	14.2
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°	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9
2.5°	3837.0	3694.2	3404.7	3121.3	2891.0	2676.9	2524.0	2379.2	2305.8	2301.7	2297.6
5°	3953.1	3653.5	3074.5	2562.7	2150.9	1820.6	1606.6	1453.7	1376.2	1349.6	1345.6
7.5°	4116.3	3665.7	2784.9	2073.5	1588.2	1304.8	1182.4	1133.5	1117.2	1098.9	1094.8
10°	4322.2	3694.2	2526.0	1669.7	1251.8	1109.0	1060.2	1039.8	1027.6	1015.3	1011.3
12.5°	4552.5	3720.7	2269.1	1386.3	1101.0	1027.6	992.9	968.4	952.1	937.9	933.8
15°	4776.8	3737.0	2002.0	1188.6	1023.5	964.3	927.6	901.2	878.7	862.4	860.4
17.5°	4999.0	3759.5	1751.3	1070.3	960.2	901.2	864.5	831.8	813.4	795.1	793.0
20°	5245.7	3755.4	1514.8	986.8	897.1	837.9	799.2	768.6	750.3	729.9	727.9
22.5°	5474.1	3735.0	1306.9	915.4	831.8	774.7	732.0	701.3	683.0	666.7	664.6
25°	5737.1	3718.7	1133.5	850.1	770.7	713.6	666.7	638.2	617.8	603.5	601.5
27.5°	5989.9	3694.2	1007.2	791.0	711.6	656.5	611.6	579.0	560.7	550.4	550.4
30°	6238.7	3688.2	960.2	734.0	658.6	603.5	558.6	528.1	513.7	509.7	507.7
32.5°	6538.3	3704.5	980.6	713.6	609.6	554.5	511.7	489.3	475.0	475.0	475.0
35°	6858.4	3700.4	1011.3	732.0	577.0	505.6	473.0	458.7	444.4	444.4	444.4
37.5°	7260.1	3706.5	1035.7	762.5	564.8	464.8	446.5	428.1	419.9	419.9	419.9
40°	7859.4	3908.3	1023.5	789.0	560.7	436.3	399.6	393.5	387.3	387.3	387.3
42.5°	8593.4	4346.6	1039.8	791.0	558.6	415.9	367.0	379.2	364.9	362.8	360.9
45°	9396.7	4825.8	1143.8	748.2	556.6	405.7	350.7	364.9	342.6	342.6	342.6
47.5°	10193.8	5300.8	1249.8	687.1	550.4	403.6	336.4	328.2	322.2	324.2	324.2
50°	11292.7	5688.1	1290.6	603.5	536.2	399.6	309.9	311.9	307.8	311.9	311.9
52.5°	12489.5	5769.7	1241.6	509.7	495.4	387.3	291.5	299.7	297.7	301.8	301.8
55°	13235.6	5682.1	1025.5	424.0	432.2	338.5	273.2	289.5	289.5	289.5	289.5
57.5°	14006.3	5309.0	727.9	344.5	358.9	277.3	256.9	279.3	277.3	275.2	275.2
60°	14560.8	4705.5	479.1	283.4	285.5	228.4	238.5	263.0	261.0	250.8	250.8
62.5°	14974.7	4038.8	307.8	240.6	218.1	205.9	218.1	238.5	230.4	208.0	203.9
65°	14927.8	3115.3	236.5	205.9	179.4	179.4	189.6	208.0	183.5	146.8	142.7
67.5°	14057.3	2108.1	195.7	173.3	150.9	148.8	157.0	173.3	157.0	124.3	120.3
70°	12501.7	1378.2	157.0	134.6	120.3	110.1	126.4	148.8	132.5	99.9	95.8
72.5°	10146.9	840.0	118.3	97.9	87.6	71.3	99.9	122.3	106.0	73.4	69.3
75°	6564.8	428.1	81.6	63.2	46.8	42.8	73.4	91.7	73.4	44.9	38.7
77.5°	2511.8	179.4	44.9	28.5	24.5	20.4	40.8	55.0	30.5	10.1	8.2
80°	483.2	75.4	22.4	14.2	12.2	8.2	6.1	4.1	0.0	0.0	0.0
82.5°	83.6	24.5	8.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	28.5	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.1	0.0	0.0	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)