

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: P971543

Luminaire Tested: **NAV-SB6D-827-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971543
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-SB6D-827-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 900mA 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: 46567.8 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G5

Input Watts (W): 440.1
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

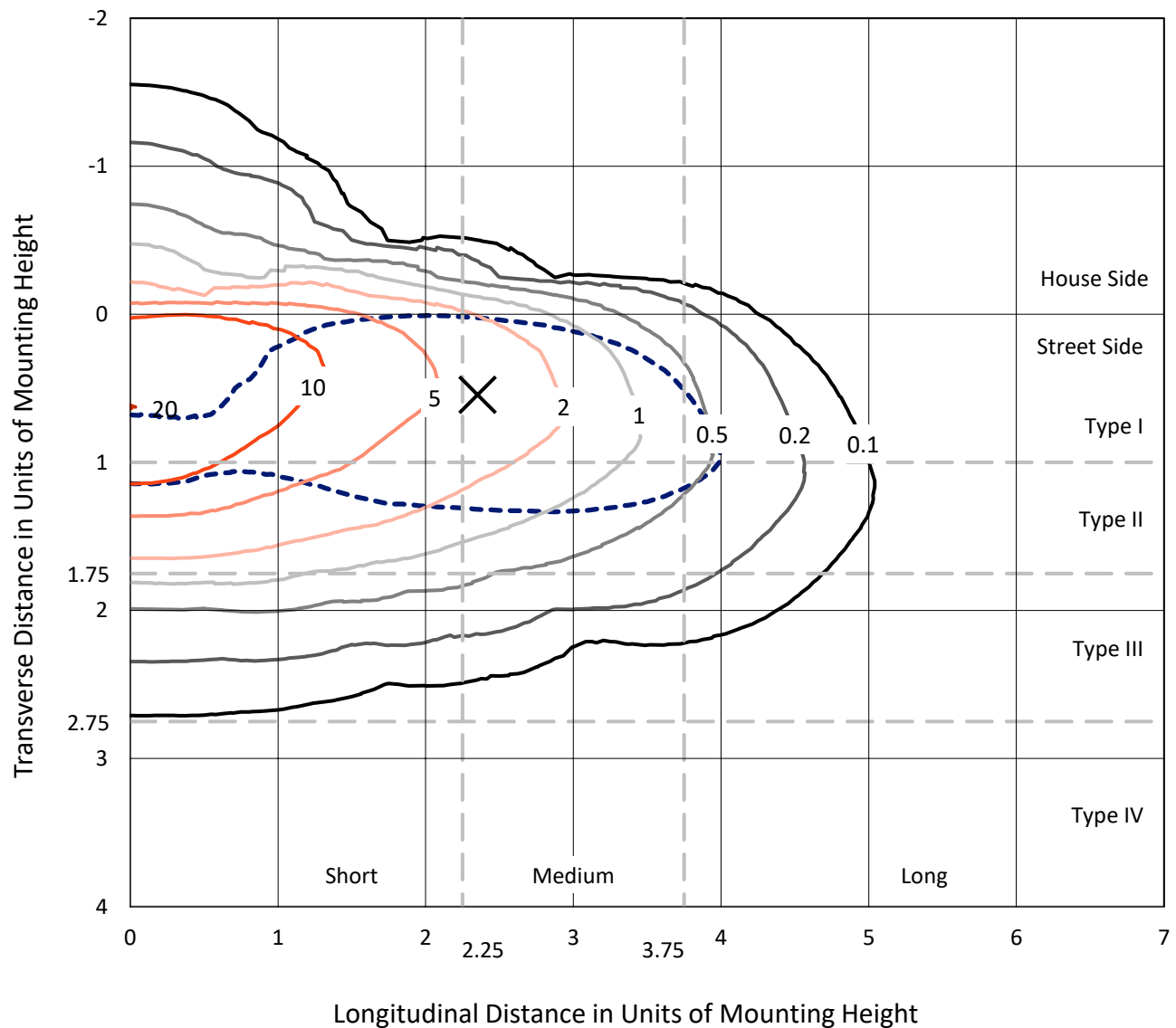


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Iso-Footcandle Lines of Horizontal Illumination

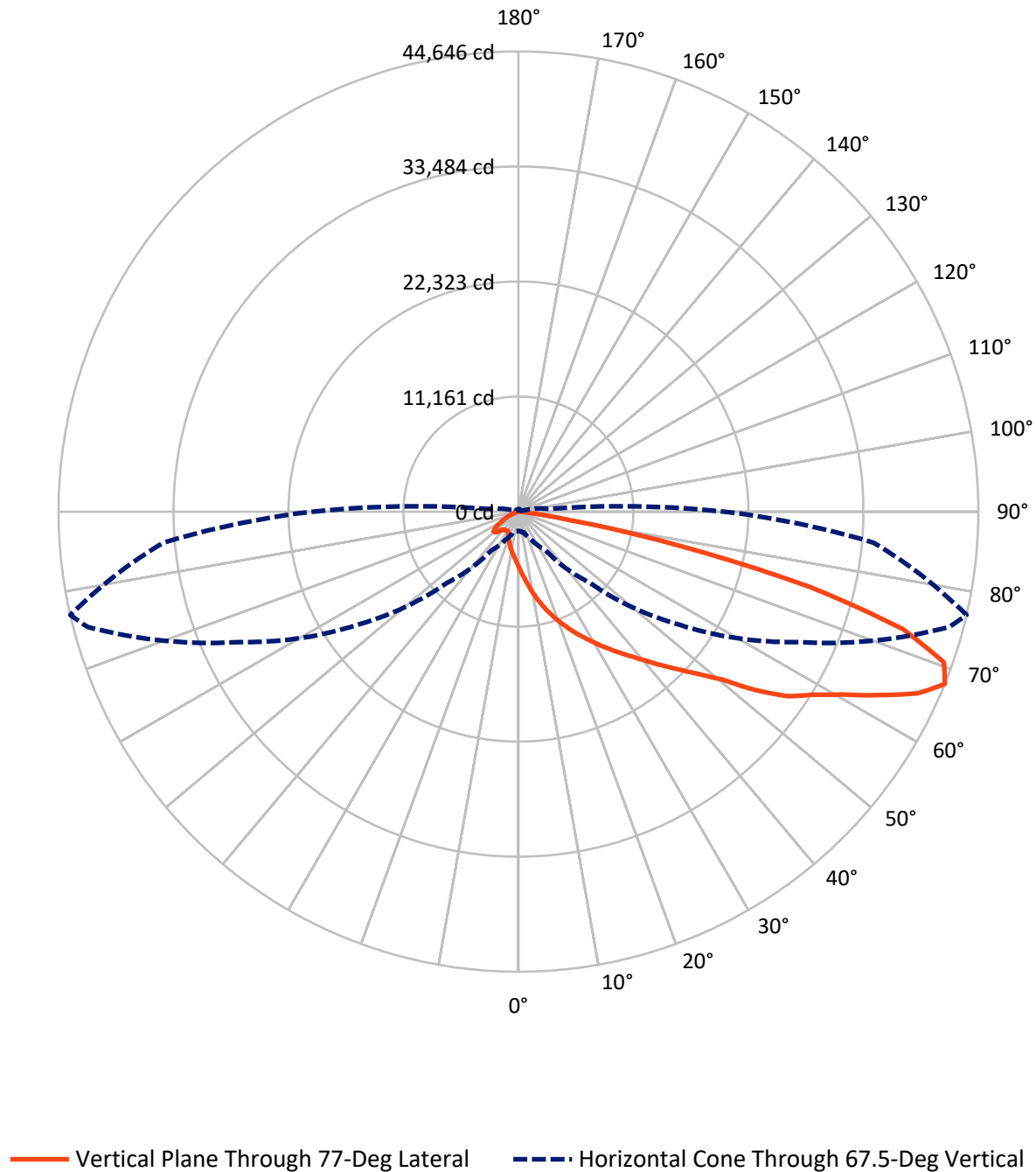
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 20.1 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	3426.0	0.0	3426.0
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	43141.8	0.0	43141.8
	% Fixture	92.6	0.0	92.6
Total	Lumens	46567.8	0.0	46567.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	548.1	1.2
10°-20°	1919.3	4.1
20°-30°	3703.8	8.0
30°-40°	6430.0	13.8
40°-50°	9336.1	20.0
50°-60°	10721.3	23.0
60°-70°	9308.1	20.0
70°-80°	4384.2	9.4
80°-90°	216.8	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°	46567.8	100.0
0°-180°	46567.8	100.0

Coefficient of Utilization



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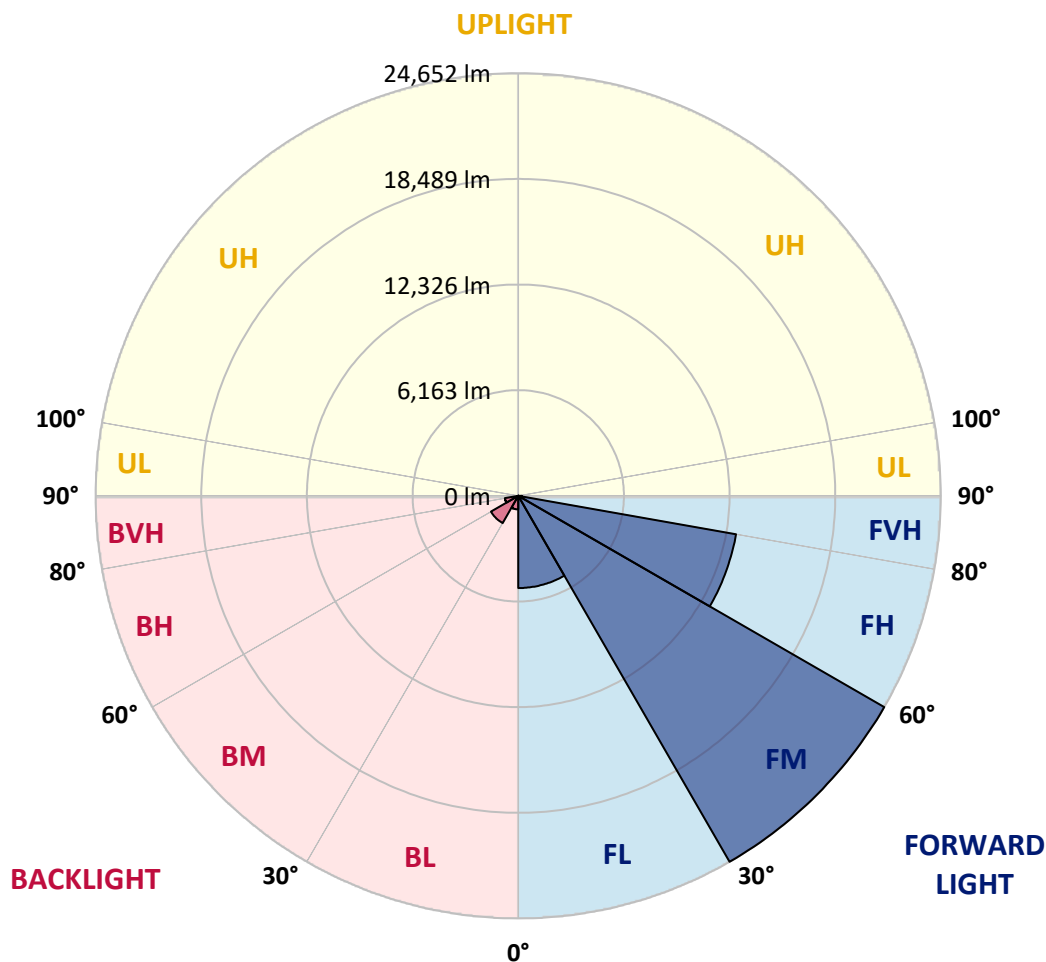
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5378.1	11.5			
FM	(30°-60°)	24651.7	52.9			
FH	(60°-80°)	12899.1	27.7			G5
FVH	(80°-90°)	212.8	0.5			G2/225
BL	(0°-30°)	793.2	1.7	B2/1000		
BM	(30°-60°)	1835.7	3.9	B2/2500		
BH	(60°-80°)	793.2	1.7	B2/1000		G2/1000
BVH	(80°-90°)	4.0	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-G5

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	5370.0	5370.0	5370.0	5370.0	5370.0	5370.0	5370.0	5370.0	5370.0	5370.0	5370.0
2.5°	7434.6	7481.0	7414.4	7287.1	7096.3	6971.9	6668.3	6382.1	6064.0	5962.7	5644.7
5°	9062.7	9103.2	9028.0	8889.2	8634.7	8391.8	7992.7	7394.1	6772.5	6572.9	6009.1
7.5°	10268.6	10291.7	10262.8	10135.5	9892.6	9617.9	9172.6	8464.1	7541.6	7321.9	6457.3
10°	11136.1	11211.2	11202.5	11153.4	10991.5	10768.9	10294.6	9487.8	8403.4	8119.9	6963.3
12.5°	11711.5	11795.4	11844.6	11954.5	11945.8	11804.1	11387.6	10534.5	9262.2	8929.7	7532.9
15°	11879.2	11968.9	12156.8	12411.3	12636.9	12709.2	12417.2	11561.2	10207.9	9782.7	8117.1
17.5°	11783.8	11922.6	12148.2	12550.1	13044.7	13371.4	13339.6	12553.1	11066.7	10580.9	8689.6
20°	11995.0	12127.9	12304.3	12642.7	13218.1	13811.0	14048.0	13501.5	11919.7	11410.8	9291.1
22.5°	13163.2	13140.1	13157.4	13212.4	13556.4	14143.5	14632.2	14363.2	12764.1	12243.6	9927.3
25°	15013.9	14909.8	14733.4	14435.6	14348.8	14632.2	15141.1	15126.6	13654.7	13096.6	10578.0
27.5°	17136.5	17119.0	16705.6	15988.4	15583.6	15473.7	15716.5	15869.9	14536.8	13941.0	11231.5
30°	19169.3	19215.6	18657.5	17859.4	17116.2	16685.4	16465.5	16575.4	15433.2	14851.9	11905.3
32.5°	20939.0	20988.2	20381.0	19446.9	18527.4	18006.8	17544.1	17272.4	16410.6	15777.3	12645.5
35°	22434.1	22483.3	21786.4	20754.0	19773.7	19302.3	18778.9	18035.8	17393.7	16803.8	13469.7
37.5°	23770.1	23755.6	22821.5	21780.5	20817.6	20444.5	20169.8	18975.5	18405.9	17836.2	14383.5
40°	24559.5	24620.2	23822.1	22674.1	21740.0	21468.2	21450.9	20140.9	19574.1	19021.8	15384.0
42.5°	24790.9	24897.9	24319.5	23376.8	22529.5	22234.5	22688.6	21401.7	20933.3	20395.4	16514.7
45°	24374.4	24478.5	24215.4	23561.9	23067.4	22876.6	23752.7	22708.8	22384.9	21852.8	17790.0
47.5°	23159.9	23290.0	23353.7	23214.8	23209.1	23402.8	24707.0	24085.2	24108.4	23564.7	19267.6
50°	20808.9	21028.7	21612.8	22104.4	22865.0	23819.3	25635.2	25577.4	26051.6	25583.2	21193.5
52.5°	16534.9	16847.2	18859.9	20204.6	21913.6	23741.2	26656.0	27971.7	29461.0	28775.6	23908.8
55°	13287.5	13287.5	14924.2	17440.1	20057.1	23226.4	27101.3	29527.5	31783.1	31621.1	25820.3
57.5°	10832.4	10962.6	12006.4	14230.2	17370.7	22000.3	27376.0	30504.9	33654.0	33535.4	27688.3
60°	6685.7	6966.2	8938.3	11133.1	14314.1	19817.0	27202.6	31493.8	35924.0	36019.4	29938.1
62.5°	3765.0	3869.2	4748.2	8010.1	11130.3	16882.0	25875.2	32046.2	38827.3	39232.2	32257.3
65°	2599.7	2651.7	2990.0	4985.4	7715.2	13440.8	23281.3	31702.1	41736.4	42554.8	34223.7
67.5°	1888.3	1914.3	2125.4	3045.0	4577.6	9745.2	19215.6	29967.0	43277.8	44645.5	34599.6
70°	1451.6	1469.0	1622.3	2001.1	2703.7	6014.8	13955.5	26517.2	42161.5	43795.3	32673.7
72.5°	1179.9	1197.2	1315.7	1480.6	1792.8	3556.9	8458.3	21534.7	37233.9	38998.0	27815.6
75°	994.8	1017.9	1124.8	1231.8	1405.4	2284.5	3967.5	14996.6	28000.6	29157.4	19342.8
77.5°	552.4	508.9	913.8	1020.8	1185.6	1445.9	1856.5	8825.6	15681.9	16002.8	8582.6
80°	344.1	355.7	725.8	821.2	910.9	728.7	850.1	3397.8	5436.5	5164.7	1662.8
82.5°	20.2	46.2	558.1	592.8	624.6	312.3	321.0	1153.8	1309.9	1202.9	295.0
85°	0.0	0.0	254.5	205.3	216.9	89.7	92.6	269.0	176.4	190.9	57.8
87.5°	0.0	0.0	0.0	5.7	0.0	8.7	17.3	23.2	8.7	11.6	20.2
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°	5370.0	5370.0	5370.0	5370.0	5370.0	5370.0	5370.0	5370.0	5370.0	5370.0	5370.0
2.5°	5442.2	5239.8	4829.2	4427.3	4100.5	3796.8	3580.0	3374.6	3270.6	3264.7	3259.0
5°	5607.1	5182.0	4360.8	3635.0	3050.8	2582.3	2278.7	2061.8	1951.9	1914.3	1908.5
7.5°	5838.4	5199.3	3950.1	2940.9	2252.6	1850.7	1677.2	1607.8	1584.6	1558.6	1552.9
10°	6130.5	5239.8	3582.9	2368.4	1775.5	1573.1	1503.7	1474.8	1457.4	1440.1	1434.3
12.5°	6457.3	5277.4	3218.5	1966.4	1561.6	1457.4	1408.2	1373.6	1350.4	1330.2	1324.4
15°	6775.4	5300.6	2839.7	1685.9	1451.6	1367.8	1315.7	1278.2	1246.3	1223.2	1220.3
17.5°	7090.5	5332.4	2484.0	1518.1	1362.0	1278.2	1226.1	1179.9	1153.8	1127.8	1124.8
20°	7440.5	5326.6	2148.6	1399.6	1272.3	1188.5	1133.5	1090.2	1064.2	1035.2	1032.4
22.5°	7764.3	5297.6	1853.6	1298.4	1179.9	1098.9	1038.1	994.8	968.7	945.6	942.7
25°	8137.4	5274.5	1607.8	1205.8	1093.1	1012.1	945.6	905.1	876.2	856.0	853.1
27.5°	8495.9	5239.8	1428.5	1122.0	1009.2	931.1	867.6	821.2	795.2	780.7	780.7
30°	8848.7	5231.2	1362.0	1041.0	934.0	856.0	792.3	749.0	728.7	722.9	720.1
32.5°	9273.8	5254.3	1390.9	1012.1	864.6	786.6	725.8	694.0	673.7	673.7	673.7
35°	9727.8	5248.5	1434.3	1038.1	818.4	717.2	670.9	650.7	630.4	630.4	630.4
37.5°	10297.5	5257.2	1469.0	1081.5	801.0	659.3	633.2	607.3	595.7	595.7	595.7
40°	11147.6	5543.4	1451.6	1119.1	795.2	618.8	566.8	558.1	549.4	549.4	549.4
42.5°	12188.7	6165.2	1474.8	1122.0	792.3	589.9	520.5	537.8	517.6	514.8	511.9
45°	13328.0	6844.7	1622.3	1061.3	789.5	575.4	497.3	517.6	485.8	485.8	485.8
47.5°	14458.6	7518.5	1772.6	974.5	780.7	572.6	477.1	465.6	456.9	459.8	459.8
50°	16017.4	8068.0	1830.4	856.0	760.6	566.8	439.5	442.4	436.6	442.4	442.4
52.5°	17714.8	8183.6	1761.1	722.9	702.7	549.4	413.5	425.1	422.2	427.9	427.9
55°	18773.2	8059.3	1454.6	601.5	613.1	480.0	387.4	410.6	410.6	410.6	410.6
57.5°	19866.2	7530.1	1032.4	488.7	508.9	393.3	364.4	396.2	393.3	390.4	390.4
60°	20652.7	6674.1	679.6	401.9	404.9	323.9	338.4	373.0	370.1	355.7	355.7
62.5°	21239.7	5728.5	436.6	341.2	309.4	292.0	309.4	338.4	326.8	295.0	289.2
65°	21173.3	4418.6	335.5	292.0	254.5	254.5	269.0	295.0	260.2	208.2	202.4
67.5°	19938.5	2990.0	277.6	245.8	214.0	211.0	222.6	245.8	222.6	176.4	170.7
70°	17732.1	1954.8	222.6	190.9	170.7	156.1	179.3	211.0	188.0	141.7	135.9
72.5°	14392.1	1191.4	167.7	138.8	124.3	101.2	141.7	173.5	150.4	104.1	98.3
75°	9311.4	607.3	115.6	89.7	66.5	60.7	104.1	130.2	104.1	63.7	54.9
77.5°	3562.6	254.5	63.7	40.5	34.7	28.9	57.8	78.1	43.4	14.5	11.6
80°	685.3	107.0	31.8	20.2	17.3	11.6	8.7	5.7	0.0	0.0	0.0
82.5°	118.6	34.7	11.6	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	40.5	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	14.5	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)