

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: P971574

Luminaire Tested: **NAV-SB6D-830-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971574
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-830-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3000K, 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: 48120.7 lumens
Efficiency: N/A
Efficacy: 109.3 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



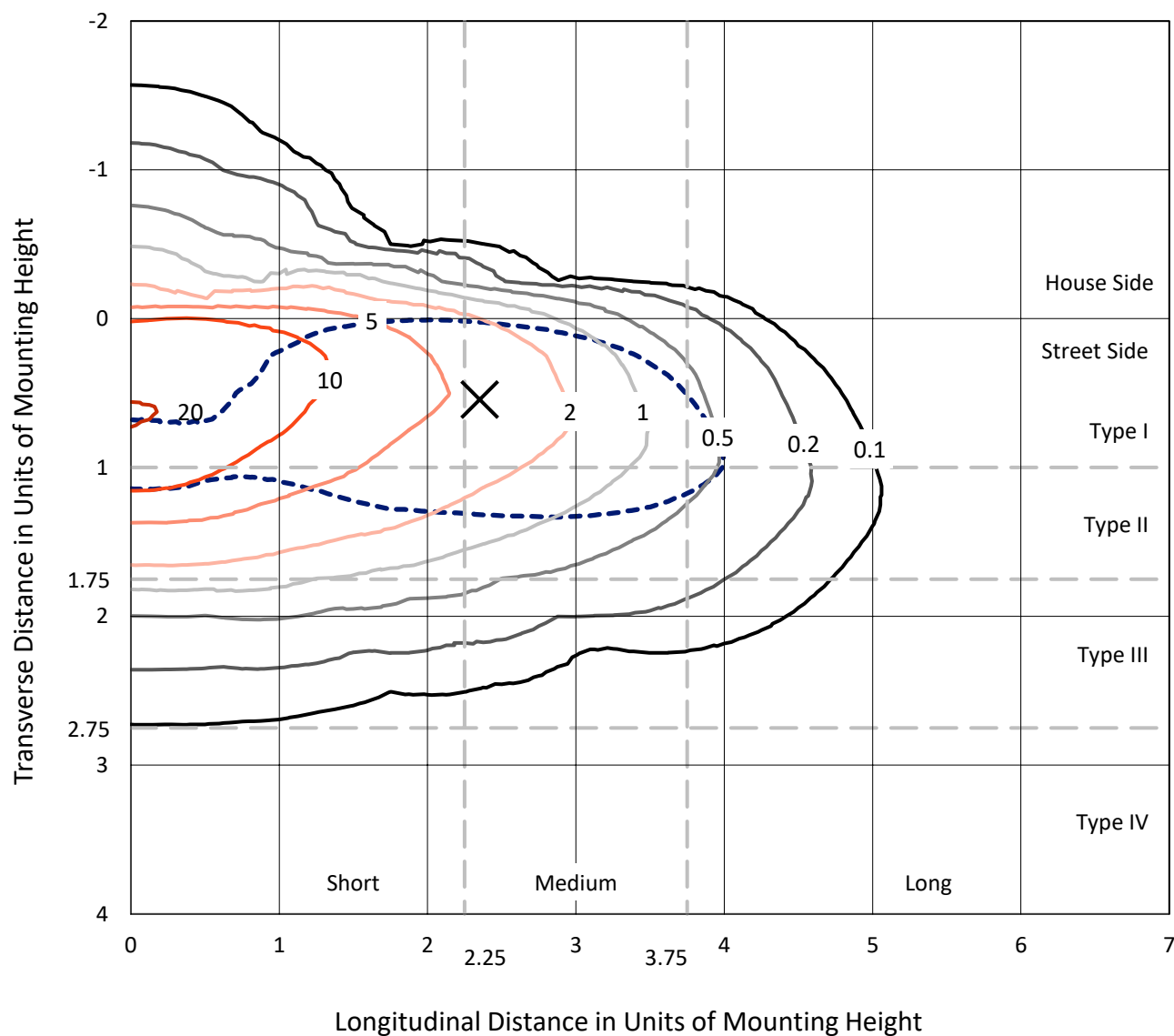
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

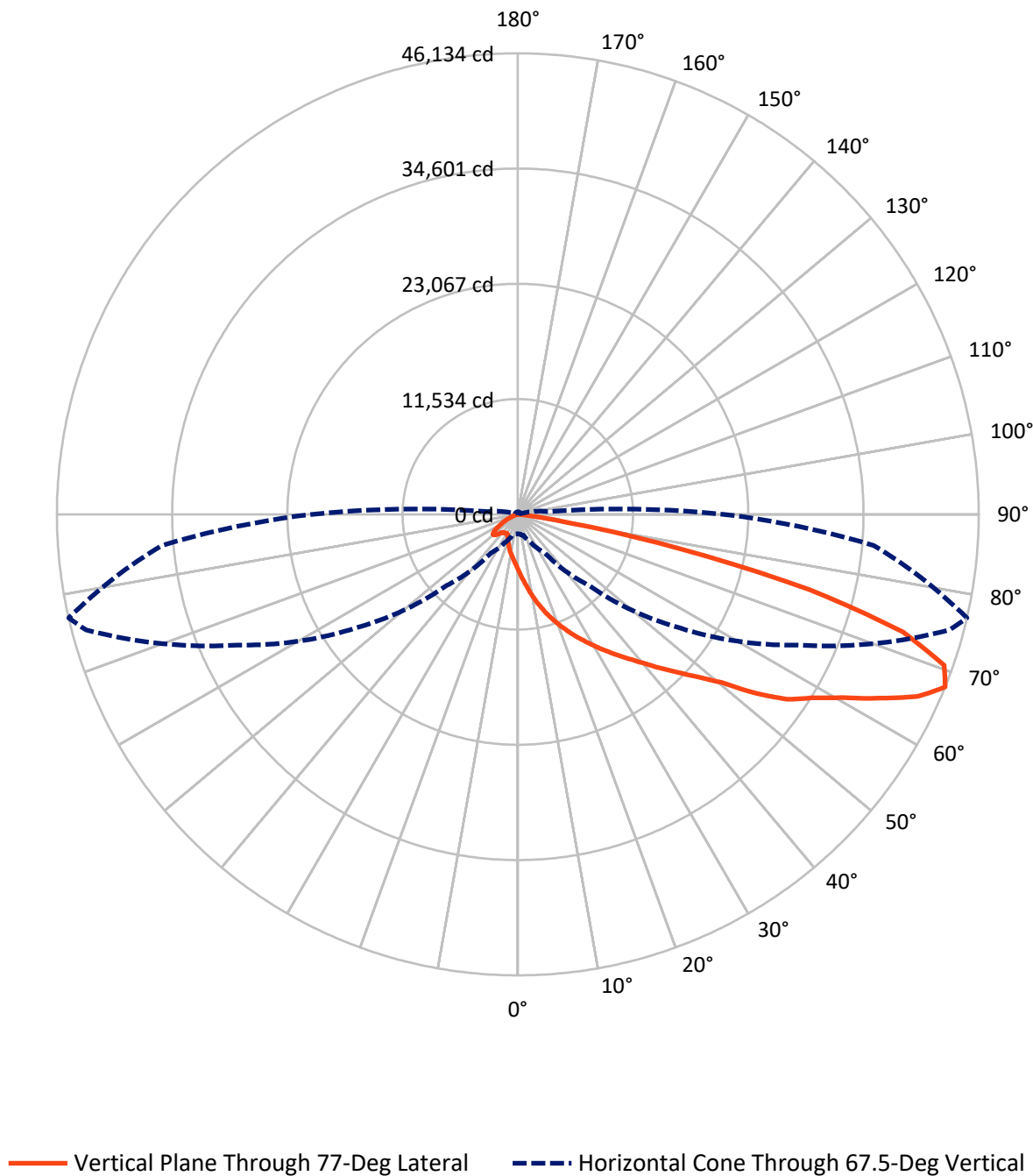
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 20.8 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	3540.3	0.0	3540.3
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	44580.4	0.0	44580.4
	% Fixture	92.6	0.0	92.6
Total	Lumens	48120.7	0.0	48120.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	566.4	1.2
10°-20°	1983.4	4.1
20°-30°	3827.3	8.0
30°-40°	6644.5	13.8
40°-50°	9647.4	20.0
50°-60°	11078.8	23.0
60°-70°	9618.5	20.0
70°-80°	4530.4	9.4
80°-90°	224.0	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°	48120.7	100.0
0°-180°	48120.7	100.0

Coefficient of Utilization



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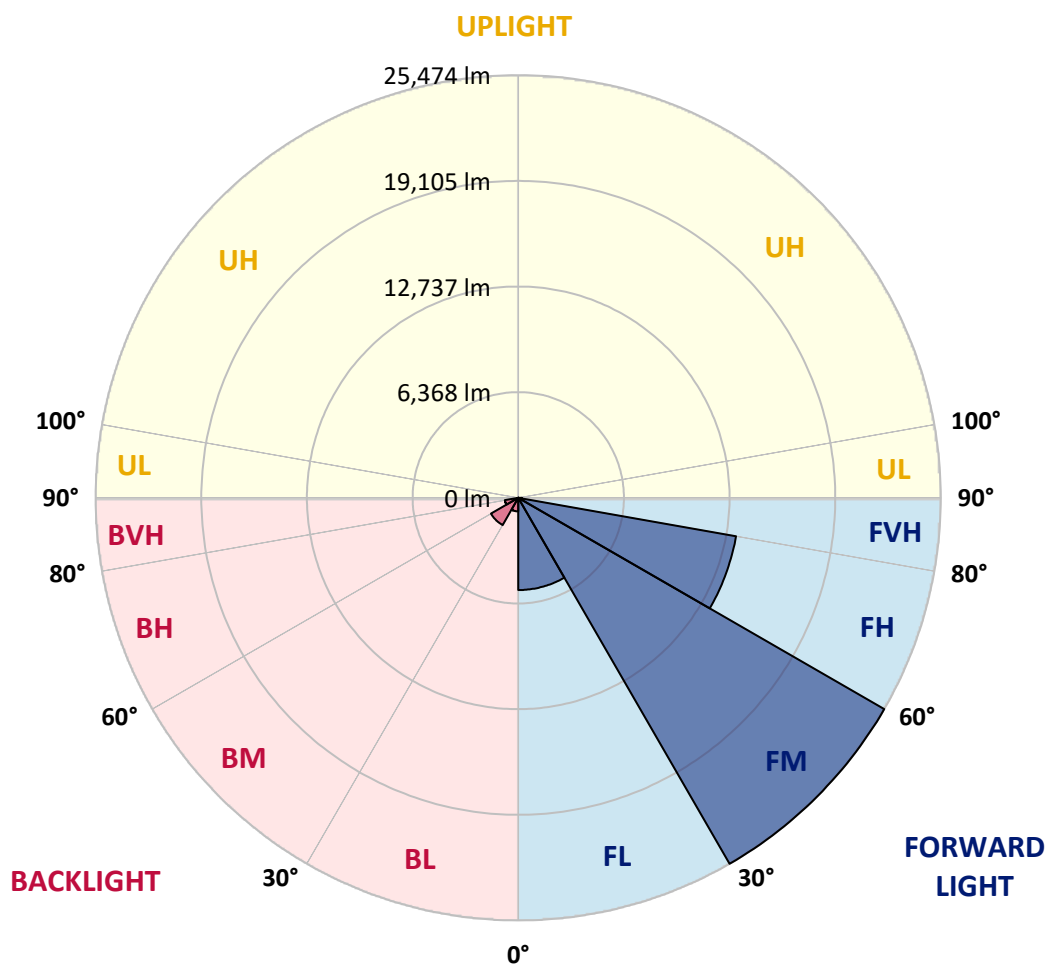
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5557.4	11.5			
FM	(30°-60°)	25473.8	52.9			
FH	(60°-80°)	13329.3	27.7			G5
FVH	(80°-90°)	219.9	0.5			G2/225
BL	(0°-30°)	819.6	1.7	B2/1000		
BM	(30°-60°)	1896.9	3.9	B2/2500		
BH	(60°-80°)	819.6	1.7	B2/1000		G2/1000
BVH	(80°-90°)	4.1	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°	5549.0	5549.0	5549.0	5549.0	5549.0	5549.0	5549.0	5549.0	5549.0	5549.0	5549.0
2.5°	7682.6	7730.3	7661.7	7530.2	7333.0	7204.4	6890.7	6594.8	6266.1	6161.6	5832.9
5°	9364.9	9406.7	9329.0	9185.6	8922.6	8671.6	8259.2	7640.8	6998.3	6792.1	6209.4
7.5°	10611.0	10634.9	10605.0	10473.6	10222.5	9938.6	9478.5	8746.3	7793.2	7566.0	6672.5
10°	11507.5	11585.1	11576.1	11525.3	11358.0	11127.9	10637.9	9804.1	8683.6	8390.8	7195.5
12.5°	12102.1	12188.7	12239.5	12353.1	12344.1	12197.7	11767.4	10885.9	9571.0	9227.5	7784.2
15°	12275.4	12368.1	12562.2	12825.2	13058.3	13133.0	12831.2	11946.7	10548.2	10109.0	8387.8
17.5°	12176.8	12320.2	12553.3	12968.6	13479.6	13817.3	13784.4	12971.6	11435.7	10933.7	8979.4
20°	12394.9	12532.4	12714.6	13064.2	13658.9	14271.5	14516.5	13951.8	12317.2	11791.3	9601.0
22.5°	13602.2	13578.2	13596.1	13652.9	14008.5	14615.1	15120.1	14842.2	13189.8	12651.9	10258.4
25°	15514.5	15407.0	15224.7	14916.9	14827.2	15120.1	15646.0	15631.0	14110.2	13533.4	10930.7
27.5°	17707.9	17690.0	17262.6	16521.6	16103.3	15989.7	16240.7	16399.1	15021.5	14406.0	11606.1
30°	19808.5	19856.4	19279.6	18454.9	17687.0	17241.7	17014.6	17128.2	15947.9	15347.2	12302.3
32.5°	21637.3	21688.1	21060.6	20095.4	19145.2	18607.3	18129.2	17848.3	16957.8	16303.4	13067.2
35°	23182.2	23233.0	22512.8	21446.1	20433.1	19946.0	19405.1	18637.2	17973.8	17364.2	13918.9
37.5°	24562.7	24547.7	23582.6	22506.8	21511.8	21126.3	20842.5	19608.4	19019.7	18431.0	14863.1
40°	25378.5	25441.2	24616.5	23430.2	22465.0	22184.2	22166.2	20812.5	20226.8	19656.1	15897.0
42.5°	25617.5	25728.1	25130.4	24156.3	23280.8	22976.0	23445.1	22115.4	21631.3	21075.5	17065.4
45°	25187.2	25294.8	25022.9	24347.5	23836.6	23639.4	24544.8	23466.0	23131.4	22581.6	18383.2
47.5°	23932.2	24066.7	24132.4	23989.0	23983.1	24183.2	25530.9	24888.4	24912.3	24350.5	19910.1
50°	21502.9	21729.9	22333.5	22841.5	23627.4	24613.5	26490.1	26430.3	26920.4	26436.3	21900.3
52.5°	17086.3	17409.0	19488.8	20878.3	22644.3	24532.9	27544.9	28904.5	30443.4	29735.2	24706.2
55°	13730.6	13730.6	15421.9	18021.7	20725.9	24000.9	28005.0	30512.1	32842.9	32675.6	26681.4
57.5°	11193.6	11328.1	12406.9	14704.8	17949.9	22734.0	28289.0	31522.1	34776.3	34653.7	28611.6
60°	6908.6	7198.5	9236.4	11504.4	14791.4	20477.9	28109.7	32544.1	37122.0	37220.6	30936.4
62.5°	3890.6	3998.1	4906.6	8277.2	11501.4	17444.9	26738.0	33114.9	40122.1	40540.4	33333.0
65°	2686.3	2740.1	3089.8	5151.5	7972.4	13889.0	24057.7	32759.2	43128.2	43973.8	35365.0
67.5°	1951.3	1978.1	2196.3	3146.5	4730.3	10070.1	19856.4	30966.4	44720.9	46134.2	35753.4
70°	1500.1	1518.0	1676.4	2067.8	2793.9	6215.4	14420.9	27401.4	43567.4	45255.8	33763.3
72.5°	1219.1	1237.1	1359.7	1529.9	1852.7	3675.4	8740.4	22252.9	38475.6	40298.4	28743.2
75°	1028.0	1051.9	1162.4	1272.9	1452.2	2360.7	4099.8	15496.7	28934.4	30129.7	19987.8
77.5°	570.7	525.9	944.2	1054.8	1225.2	1494.0	1918.4	9119.8	16204.8	16536.5	8868.9
80°	355.6	367.6	750.0	848.6	941.3	753.1	878.5	3511.1	5617.7	5336.9	1718.2
82.5°	20.9	47.8	576.7	612.5	645.4	322.8	331.7	1192.3	1353.6	1243.1	304.8
85°	0.0	0.0	262.9	212.2	224.1	92.7	95.6	277.9	182.2	197.2	59.8
87.5°	0.0	0.0	0.0	5.9	0.0	8.9	17.9	23.9	8.9	12.0	20.9
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°	5549.0	5549.0	5549.0	5549.0	5549.0	5549.0	5549.0	5549.0	5549.0	5549.0	5549.0
2.5°	5623.8	5414.6	4990.2	4574.9	4237.2	3923.5	3699.3	3487.2	3379.6	3373.7	3367.6
5°	5794.0	5354.8	4506.1	3756.1	3152.5	2668.4	2354.6	2130.6	2017.0	1978.1	1972.2
7.5°	6033.2	5372.7	4081.9	3038.9	2327.8	1912.4	1733.2	1661.4	1637.5	1610.6	1604.6
10°	6334.9	5414.6	3702.3	2447.3	1834.7	1625.5	1553.8	1524.0	1506.0	1488.1	1482.1
12.5°	6672.5	5453.4	3325.8	2032.0	1613.7	1506.0	1455.2	1419.4	1395.4	1374.5	1368.6
15°	7001.3	5477.3	2934.4	1742.1	1500.1	1413.4	1359.7	1320.8	1287.9	1264.0	1261.0
17.5°	7327.0	5510.2	2566.8	1568.8	1407.4	1320.8	1267.0	1219.1	1192.3	1165.4	1162.4
20°	7688.5	5504.1	2220.3	1446.3	1314.8	1228.2	1171.4	1126.6	1099.6	1069.8	1066.8
22.5°	8023.2	5474.3	1915.4	1341.7	1219.1	1135.5	1072.8	1028.0	1001.0	977.1	974.2
25°	8408.7	5450.4	1661.4	1246.1	1129.6	1045.8	977.1	935.3	905.4	884.5	881.5
27.5°	8779.2	5414.6	1476.1	1159.4	1042.8	962.2	896.5	848.6	821.7	806.8	806.8
30°	9143.8	5405.5	1407.4	1075.7	965.1	884.5	818.8	774.0	753.1	747.0	744.0
32.5°	9583.0	5429.5	1437.4	1045.8	893.5	812.8	750.0	717.2	696.3	696.3	696.3
35°	10052.2	5423.5	1482.1	1072.8	845.6	741.1	693.2	672.3	651.4	651.4	651.4
37.5°	10640.8	5432.5	1518.0	1117.6	827.7	681.3	654.4	627.5	615.5	615.5	615.5
40°	11519.4	5728.3	1500.1	1156.4	821.7	639.5	585.7	576.7	567.7	567.7	567.7
42.5°	12595.1	6370.8	1524.0	1159.4	818.8	609.6	537.9	555.8	534.8	531.9	528.9
45°	13772.4	7073.0	1676.4	1096.6	815.8	594.6	513.9	534.8	502.0	502.0	502.0
47.5°	14940.8	7769.2	1831.8	1007.1	806.8	591.6	493.0	481.1	472.1	475.1	475.1
50°	16551.4	8336.9	1891.5	884.5	785.9	585.7	454.2	457.2	451.2	457.2	457.2
52.5°	18305.5	8456.5	1819.8	747.0	726.1	567.7	427.3	439.2	436.2	442.3	442.3
55°	19399.1	8328.0	1503.1	621.6	633.4	496.0	400.4	424.4	424.4	424.4	424.4
57.5°	20528.7	7781.2	1066.8	505.0	525.9	406.4	376.5	409.4	406.4	403.4	403.4
60°	21341.4	6896.7	702.2	415.3	418.3	334.7	349.6	385.5	382.5	367.6	367.6
62.5°	21948.0	5919.6	451.2	352.6	319.7	301.8	319.7	349.6	337.6	304.8	298.8
65°	21879.3	4566.0	346.7	301.8	262.9	262.9	277.9	304.8	269.0	215.1	209.2
67.5°	20603.4	3089.8	286.9	254.0	221.1	218.1	230.1	254.0	230.1	182.2	176.3
70°	18323.4	2020.0	230.1	197.2	176.3	161.3	185.2	218.1	194.2	146.4	140.4
72.5°	14872.1	1231.1	173.3	143.4	128.5	104.6	146.4	179.3	155.4	107.6	101.6
75°	9621.9	627.5	119.5	92.7	68.8	62.7	107.6	134.5	107.6	65.7	56.8
77.5°	3681.4	262.9	65.7	41.8	35.9	29.9	59.8	80.7	44.8	15.0	12.0
80°	708.2	110.6	32.9	20.9	17.9	12.0	8.9	5.9	0.0	0.0	0.0
82.5°	122.5	35.9	12.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	41.8	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	15.0	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)