

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: P969345

Luminaire Tested: **NAV-SB5D-740-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969345
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-740-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 56489.8 lumens
Efficiency: N/A
Efficacy: 154.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B5 - U0 - G5

Input Watts (W): 364.9
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



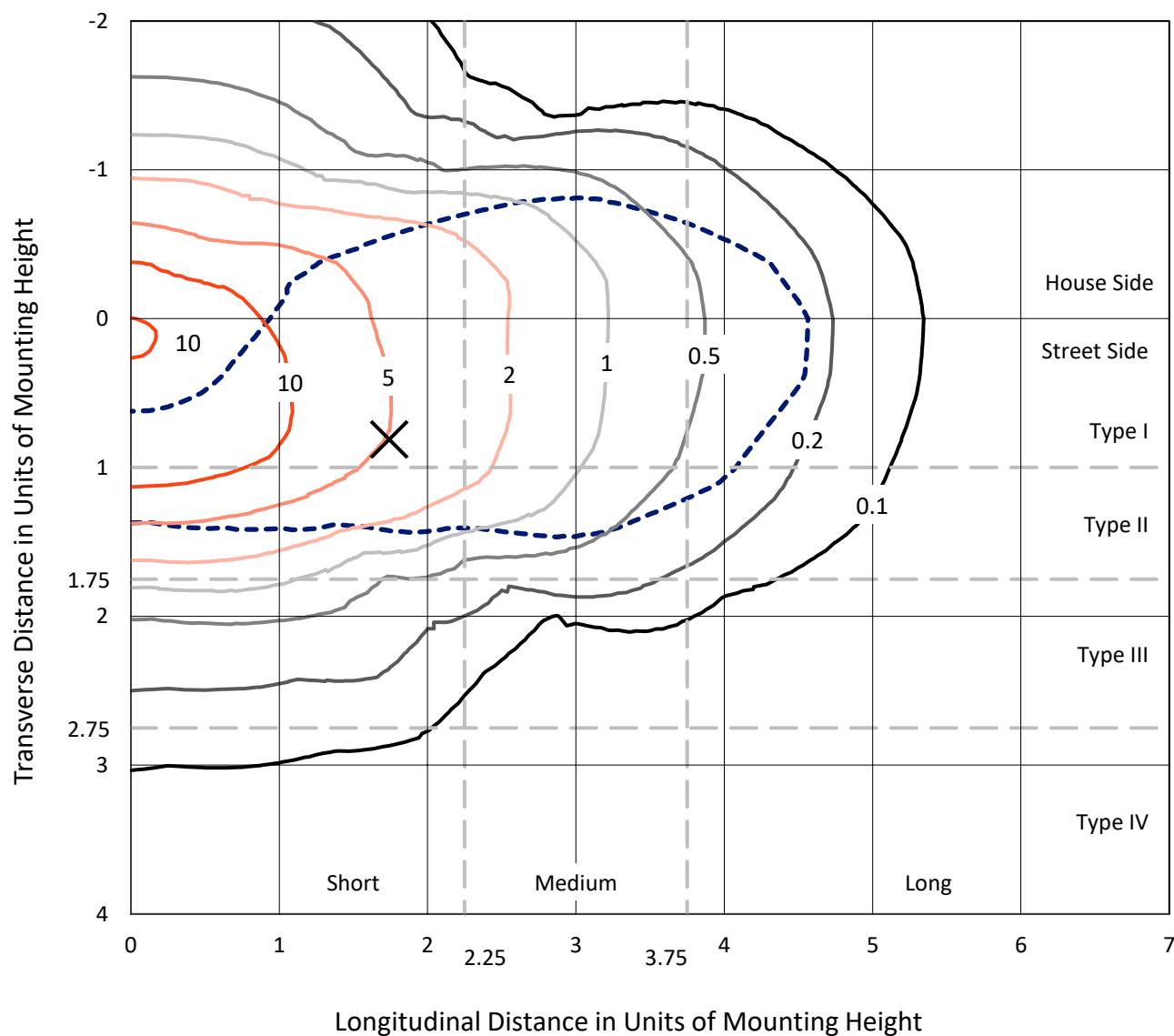
REPORT NUMBER: P969345

CATALOG NUMBER: NAV-SB5D-740-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

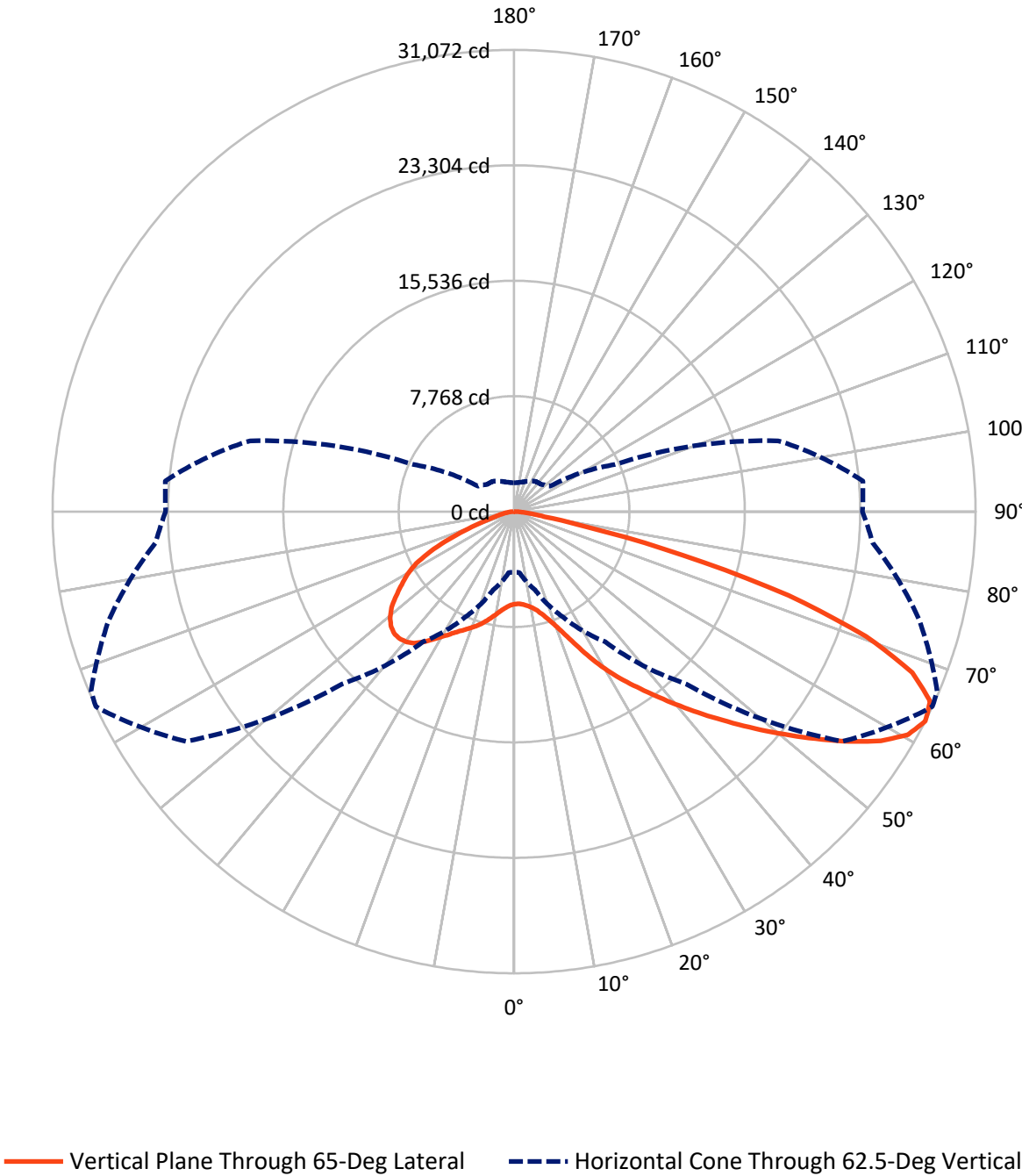


Based on 25 foot mounting height. Maximum calculated value = 15.8 fc

Type II - Short - N/A

REPORT NUMBER: P969345
CATALOG NUMBER: NAV-SB5D-740-U-T2U

Luminous Intensity Polar Plot



REPORT NUMBER: P969345

CATALOG NUMBER: NAV-SB5D-740-U-T2U

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	17825.7	0.0	17825.7
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	38664.1	0.0	38664.1
	% Fixture	68.4	0.0	68.4
Total	Lumens	56489.8	0.0	56489.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	620.6	1.1
10°-20°	2104.6	3.7
20°-30°	4267.3	7.6
30°-40°	7384.4	13.1
40°-50°	11174.9	19.8
50°-60°	13101.8	23.2
60°-70°	10984.3	19.4
70°-80°	6064.2	10.7
80°-90°	787.7	1.4
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°	56489.8	100.0
0°-180°	56489.8	100.0

Coefficient of Utilization



REPORT NUMBER: P969345

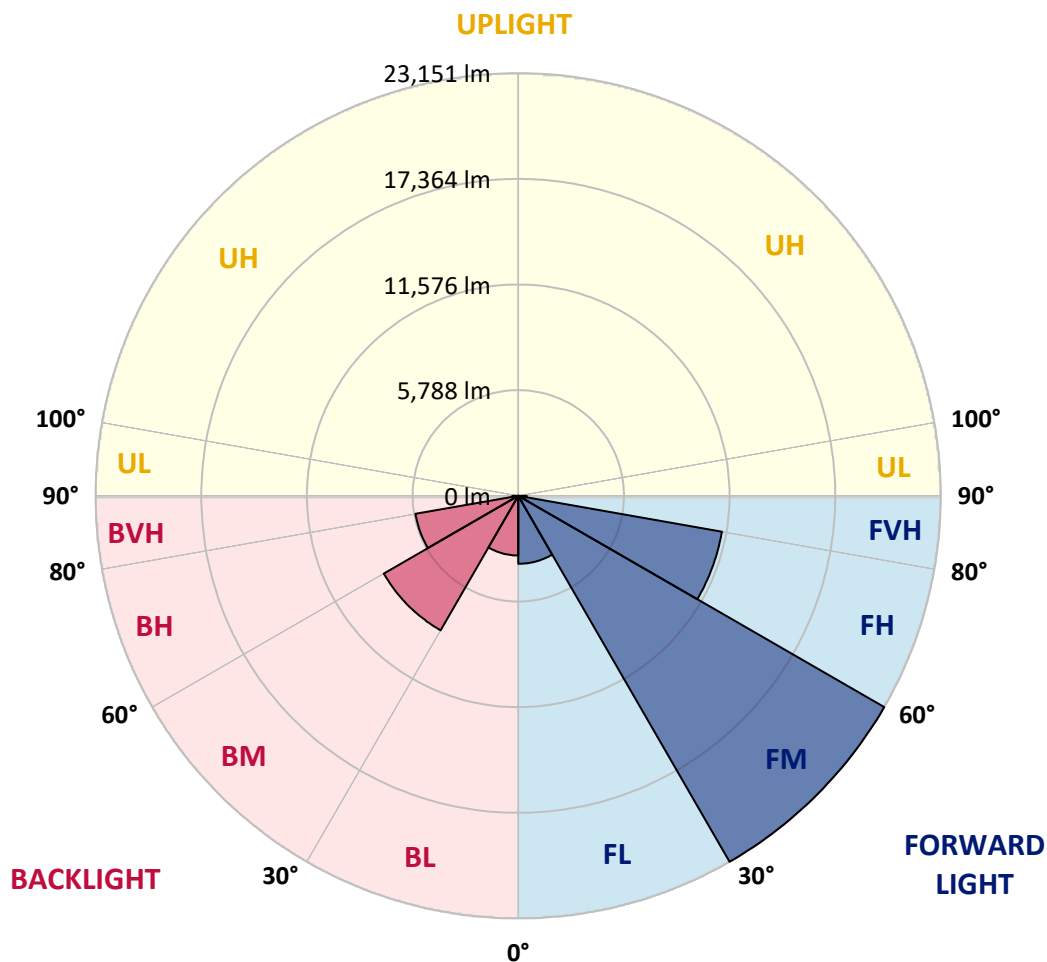
CATALOG NUMBER: NAV-SB5D-740-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3723.4	6.6			
FM	(30°-60°)	23151.3	41.0			
FH	(60°-80°)	11330.2	20.1			G4/12000
FVH	(80°-90°)	459.1	0.8			G3/500
BL	(0°-30°)	3269.0	5.8	B4/5000		
BM	(30°-60°)	8509.7	15.1	B5		
BH	(60°-80°)	5718.3	10.1	B5		G5
BVH	(80°-90°)	328.6	0.6			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5

Type II Short



REPORT NUMBER: P969345

CATALOG NUMBER: NAV-SB5D-740-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	6224.9	6224.9	6224.9	6224.9	6224.9	6224.9	6224.9	6224.9	6224.9	6224.9	6224.9
2.5°	6183.9	6166.3	6181.0	6181.0	6186.8	6183.9	6204.4	6210.3	6219.1	6236.6	6236.6
5°	6122.3	6119.5	6145.8	6169.3	6192.7	6213.2	6239.6	6277.7	6283.6	6304.1	6330.4
7.5°	6101.8	6084.3	6125.3	6154.6	6210.3	6260.1	6330.4	6394.9	6421.3	6430.1	6479.9
10°	6260.1	6230.8	6268.9	6286.4	6333.4	6383.2	6465.3	6567.8	6597.1	6632.3	6688.0
12.5°	6529.8	6497.5	6553.1	6579.6	6623.6	6667.5	6723.2	6822.8	6837.5	6901.9	6954.7
15°	6899.0	6860.9	6896.1	6928.3	7001.6	7042.6	7098.3	7195.0	7195.0	7244.8	7282.9
17.5°	7400.2	7350.4	7376.7	7388.4	7435.4	7496.8	7590.6	7675.6	7719.6	7702.1	7649.3
20°	8147.5	8085.9	8085.9	8027.4	8009.8	8059.6	8182.7	8299.9	8346.8	8256.0	8127.0
22.5°	9270.0	9182.1	9132.2	8933.0	8853.8	8859.7	8982.8	9126.4	9164.5	9003.3	8713.1
25°	10697.3	10559.6	10492.1	10199.1	10020.3	9864.9	9961.7	10146.3	10199.1	9999.8	9530.9
27.5°	12124.5	12133.3	12068.9	11717.2	11421.2	11136.9	11087.0	11280.5	11336.2	11110.5	10530.2
30°	14126.2	13918.2	13795.1	13373.1	12951.0	12552.5	12347.3	12426.4	12441.0	12171.5	11497.3
32.5°	15852.4	15799.8	15535.9	15166.7	14624.5	14000.3	13657.3	13531.3	13507.9	13123.9	12323.9
35°	17819.0	17789.7	17511.3	17071.7	16485.5	15618.0	14999.6	14639.2	14609.8	14070.6	13141.5
37.5°	19817.8	19817.8	19545.2	19064.6	18457.9	17373.5	16432.8	15861.3	15767.5	15064.1	13973.8
40°	21412.1	21315.4	21365.2	21163.0	20468.4	19316.6	18024.2	17194.8	17068.7	16224.7	14858.9
42.5°	22317.7	22285.4	22584.4	22810.0	22525.8	21605.6	19776.8	18639.6	18463.7	17502.5	15878.9
45°	22520.0	22484.8	23018.2	23844.7	24243.2	23865.2	21681.7	20160.7	19946.7	18838.9	16972.1
47.5°	22054.0	21983.6	22766.2	24070.3	25348.1	26013.4	23745.0	21810.7	21500.1	20140.1	18094.5
50°	20653.0	20585.7	21769.7	23501.7	25720.3	27473.0	25984.1	23560.3	23085.6	21535.2	19228.7
52.5°	17608.0	17640.2	19495.4	21875.1	25230.9	28381.4	27912.5	25403.8	24832.4	22962.5	20292.5
55°	13715.9	13786.2	16066.5	18686.5	23273.1	28243.7	29228.5	27302.9	26734.4	24304.8	21391.6
57.5°	9820.9	10131.6	12268.1	14861.9	19513.0	26060.3	29515.7	29108.3	28557.3	25770.1	22467.2
60°	6365.6	6421.3	8619.3	11233.6	14858.9	22180.0	28932.5	30476.9	30046.1	27264.8	23366.9
62.5°	4079.6	4117.7	5457.1	7857.3	10694.3	16409.3	26968.9	31072.0	30940.0	28252.5	24231.5
65°	2998.1	2968.8	3666.4	5193.3	7203.8	10119.9	23155.9	30784.6	31045.5	28870.9	24946.7
67.5°	2502.8	2461.8	2804.7	3596.0	5307.6	5747.2	17133.2	28917.8	29873.2	28800.6	25471.2
70°	2280.1	2245.0	2453.0	2669.9	4141.2	3848.1	8637.0	25140.1	26611.3	28000.4	25386.3
72.5°	1931.4	1869.8	2154.1	2371.0	3220.9	2951.3	3569.7	19310.8	21104.4	25436.1	24190.5
75°	1497.6	1456.6	1699.9	2086.7	2420.8	2303.6	2256.6	11726.0	13683.7	19671.3	21163.0
77.5°	1186.9	1131.3	1354.0	1626.6	2177.5	1738.0	1644.2	5049.7	6989.9	12558.3	15834.9
80°	893.9	844.1	1028.7	1286.6	1673.4	1310.1	1063.8	2060.4	2634.8	6362.7	7962.9
82.5°	636.0	592.0	718.0	943.7	1125.4	1175.3	653.5	1154.8	1298.4	2453.0	1779.0
85°	407.3	381.0	480.6	592.0	715.1	756.1	398.6	603.7	662.4	1011.2	741.5
87.5°	222.7	181.7	257.9	275.5	331.2	301.9	190.5	219.8	237.4	366.3	313.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P969345

CATALOG NUMBER: NAV-SB5D-740-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6224.9	6224.9	6224.9	6224.9	6224.9	6224.9	6224.9	6224.9	6224.9	6224.9	6224.9
2.5°	6248.4	6257.2	6286.4	6295.2	6315.7	6342.2	6359.7	6377.3	6377.3	6394.9	6394.9
5°	6333.4	6353.9	6415.5	6447.7	6500.4	6553.1	6585.4	6623.6	6646.9	6658.7	6664.6
7.5°	6497.5	6529.8	6617.6	6673.4	6764.2	6837.5	6887.3	6940.1	6951.8	6984.0	6972.3
10°	6720.2	6758.3	6858.0	6963.4	7071.9	7162.8	7209.6	7247.8	7262.4	7268.3	7253.6
12.5°	6975.2	7030.9	7159.8	7288.8	7403.1	7482.2	7494.0	7485.2	7444.2	7409.0	7409.0
15°	7288.8	7338.6	7482.2	7622.9	7734.2	7748.9	7675.6	7628.8	7579.0	7570.1	7570.1
17.5°	7663.9	7690.3	7822.2	7959.9	7968.8	7918.9	7810.5	7766.5	7719.6	7687.4	7690.3
20°	8100.6	8091.9	8185.6	8244.2	8182.7	8030.3	7866.2	7792.9	7746.0	7707.9	7710.9
22.5°	8622.3	8554.9	8543.2	8528.5	8364.4	8044.9	7822.2	7728.4	7655.1	7602.4	7620.0
25°	9381.3	9123.4	8944.7	8845.0	8475.7	7965.8	7681.6	7473.5	7335.7	7244.8	7280.0
27.5°	10330.9	9897.2	9445.8	9202.6	8475.7	7804.7	7341.6	7004.5	6778.8	6685.0	6732.0
30°	11236.6	10782.3	10117.0	9633.4	8455.2	7540.8	6793.5	6324.6	6060.8	5967.0	6022.7
32.5°	12010.2	11515.0	10829.1	10105.3	8405.4	7113.0	6113.6	5594.9	5339.8	5228.4	5284.2
35°	12728.2	12200.8	11544.3	10624.0	8273.5	6485.8	5366.2	4970.5	4686.3	4507.5	4566.2
37.5°	13463.9	12836.7	12221.3	11093.0	8036.1	5753.1	4791.8	4454.8	4120.6	3880.3	3944.8
40°	14264.0	13513.7	12945.1	11371.3	7646.4	5055.6	4346.3	4038.6	3684.0	3429.0	3478.8
42.5°	15198.9	14325.5	13751.1	11515.0	7113.0	4560.2	4056.1	3754.3	3420.2	3212.1	3253.1
45°	16174.8	15219.4	14486.7	11512.0	6518.0	4328.8	3962.3	3663.5	3294.1	3077.3	3112.5
47.5°	17197.7	16154.3	15122.7	11324.4	6002.2	4361.0	3909.7	3467.1	3059.7	2848.7	2878.0
50°	18223.5	17177.2	15738.2	10972.7	5782.4	4290.6	3713.3	3191.6	2710.9	2520.5	2532.2
52.5°	19240.5	18264.5	16268.6	10471.6	5559.6	4029.8	3461.2	2834.0	2567.3	2435.5	2435.5
55°	20263.2	19340.1	16846.0	9741.8	5002.8	3725.0	3039.2	2699.2	2453.0	2332.9	2321.1
57.5°	21289.0	20582.7	17394.0	9012.1	4302.3	3349.9	2807.7	2535.1	2338.7	2236.1	2218.6
60°	22355.9	22004.1	17959.6	8340.9	3610.7	2869.2	2637.6	2403.2	2204.0	2089.7	2080.9
62.5°	23454.9	23569.2	18402.2	7476.4	2974.8	2576.1	2485.3	2245.0	2051.5	1943.1	1940.1
65°	24562.7	25078.5	18692.4	6277.7	2412.0	2297.7	2321.1	2072.0	1875.6	1781.9	1779.0
67.5°	25398.0	26165.8	18610.3	4750.8	1978.2	2033.9	2116.0	1890.3	1705.7	1632.4	1635.4
70°	25491.7	26036.8	17801.4	3253.1	1655.9	1776.0	1887.4	1711.5	1521.1	1468.3	1471.3
72.5°	24243.2	24278.4	15547.7	2124.8	1400.9	1559.1	1647.1	1529.8	1345.2	1292.4	1289.6
75°	20969.6	20078.6	11415.3	1400.9	1172.3	1339.4	1421.4	1339.4	1160.6	1172.3	1131.3
77.5°	15887.6	14220.0	6931.3	996.5	978.9	1125.4	1236.8	1178.1	1025.7	1151.8	1014.0
80°	8185.6	7693.2	3091.9	744.5	773.7	899.7	1017.0	940.7	811.8	773.7	706.3
82.5°	1875.6	2180.5	1219.2	533.4	559.8	647.7	776.6	706.3	583.2	492.4	486.5
85°	656.5	718.0	539.3	334.2	328.2	404.5	527.6	471.8	395.6	316.5	334.2
87.5°	208.1	272.5	202.2	134.8	140.6	181.7	243.2	222.7	184.6	120.1	126.0
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)