

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: McGRAW-EDISON

Report Number: P833533

Luminaire Tested: **TTN-D2-735-U-MQ-UPL1**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833533
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TTN-D2-735-U-MQ-UPL1
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3500K, 70 CRI LEDS AND MEDIUM DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5554.9 lumens
Efficiency: N/A
Efficacy: 123.2 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U3 - G1

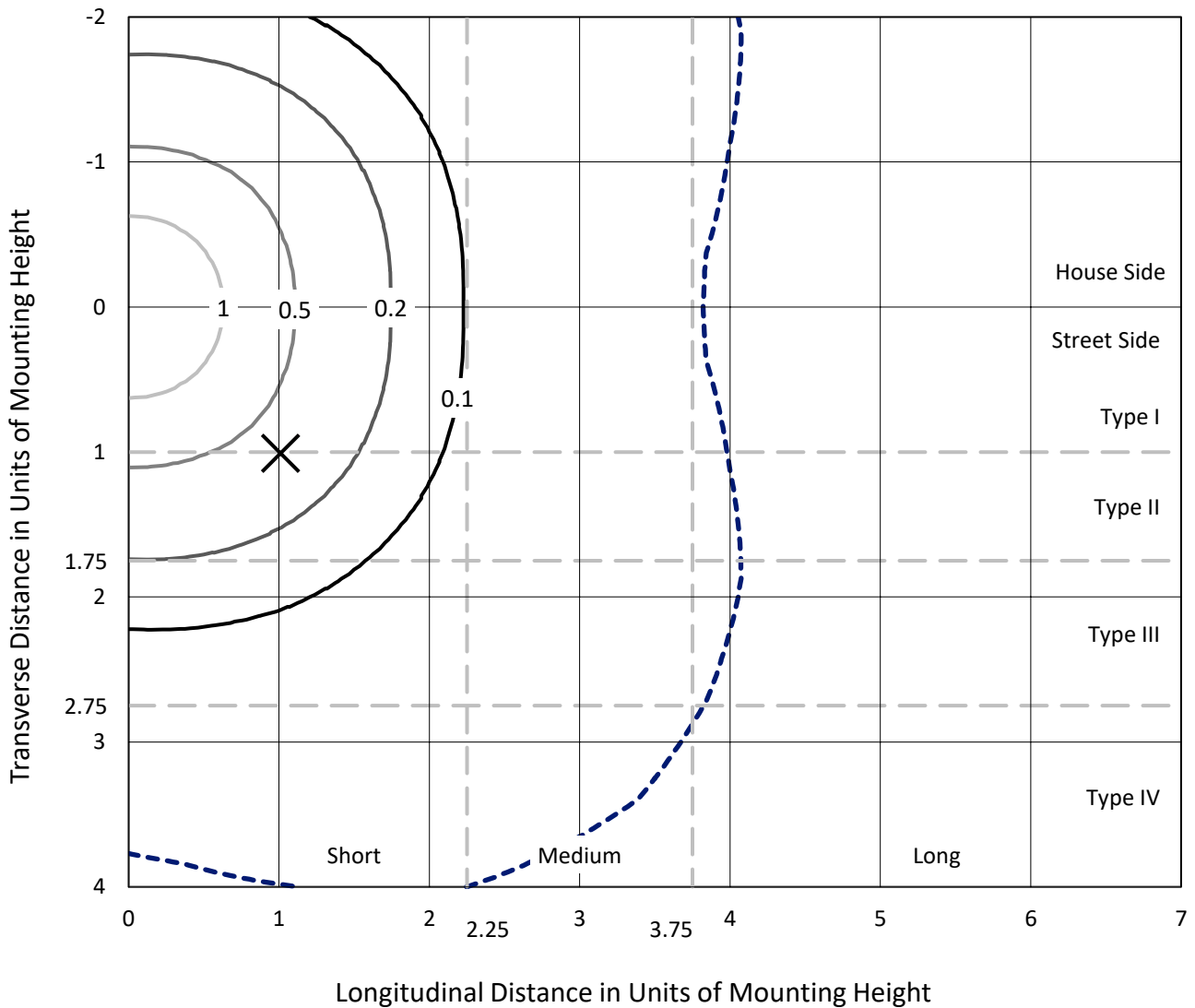
Input Watts (W): 45.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

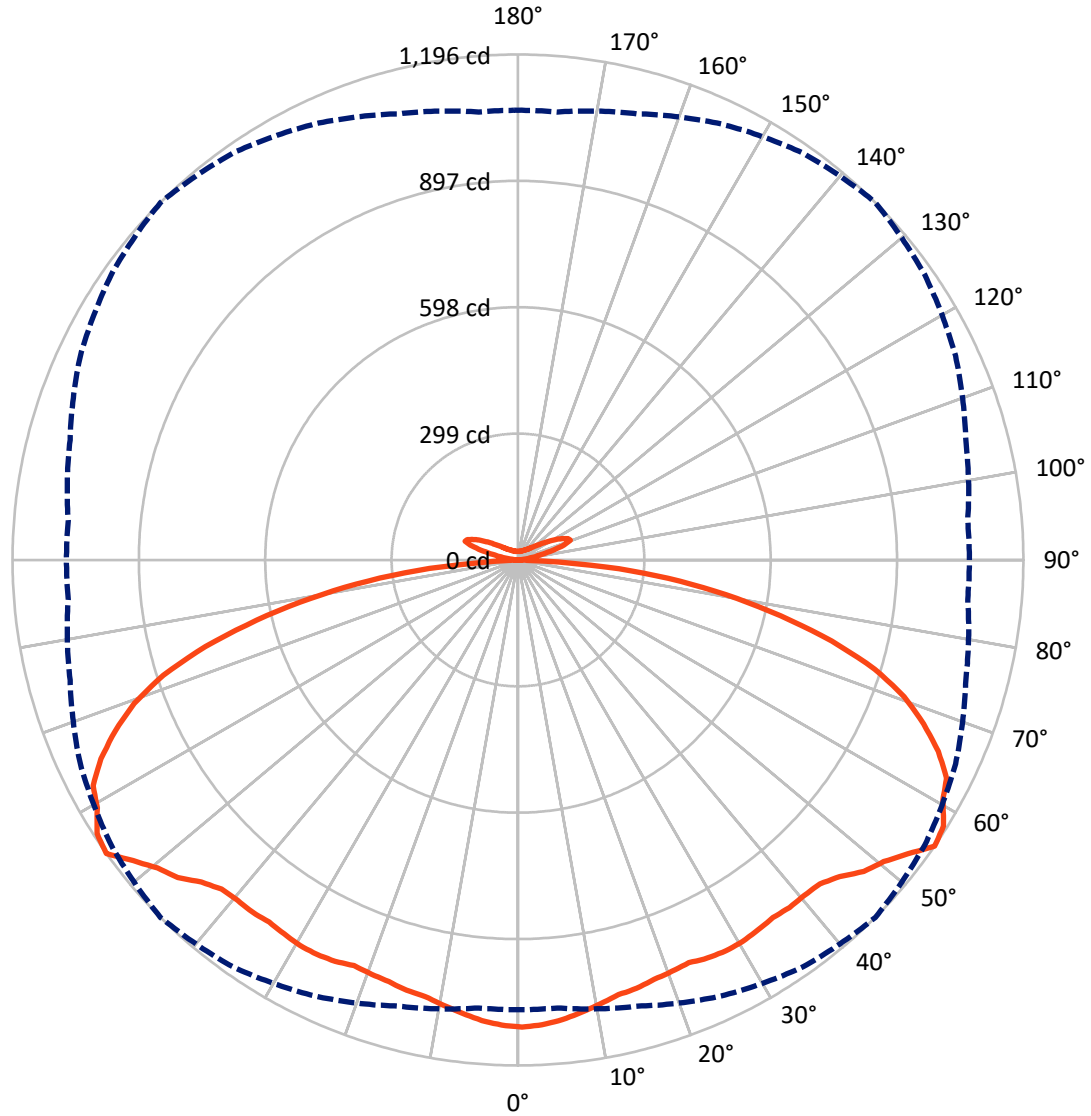
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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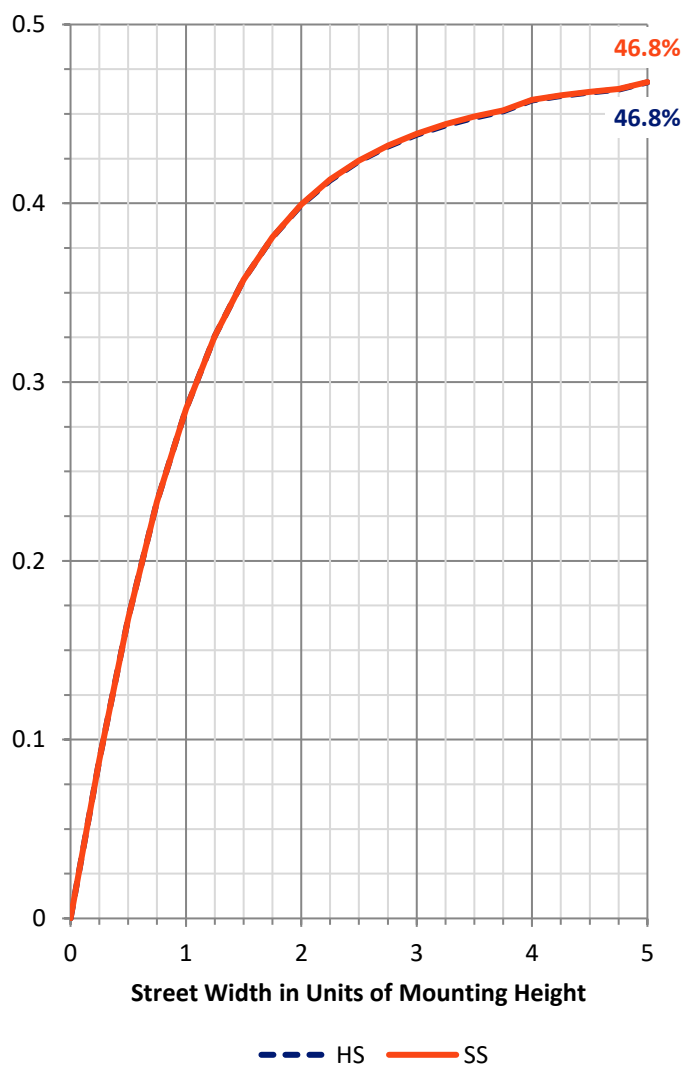
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2627.2	150.2	2777.5
	% Fixture	47.3	2.7	50.0
Street Side	Lumens	2627.2	150.2	2777.5
	% Fixture	47.3	2.7	50.0
Total	Lumens	5254.4	300.5	5554.9
	% Fixture	94.6	5.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.5	1.9
10°-20°	297.0	5.3
20°-30°	480.1	8.6
30°-40°	649.6	11.7
40°-50°	813.7	14.6
50°-60°	997.1	17.9
60°-70°	999.5	18.0
70°-80°	721.3	13.0
80°-90°	192.7	3.5
90°-100°	6.7	0.1
100°-110°	68.2	1.2
110°-120°	99.6	1.8
120°-130°	57.8	1.0
130°-140°	30.6	0.6
140°-150°	18.2	0.3
150°-160°	11.2	0.2
160°-170°	6.1	0.1
170°-180°	2.0	0.0
0°-90°	5254.4	94.6
0°-180°	5554.9	100.0

Coefficient of Utilization

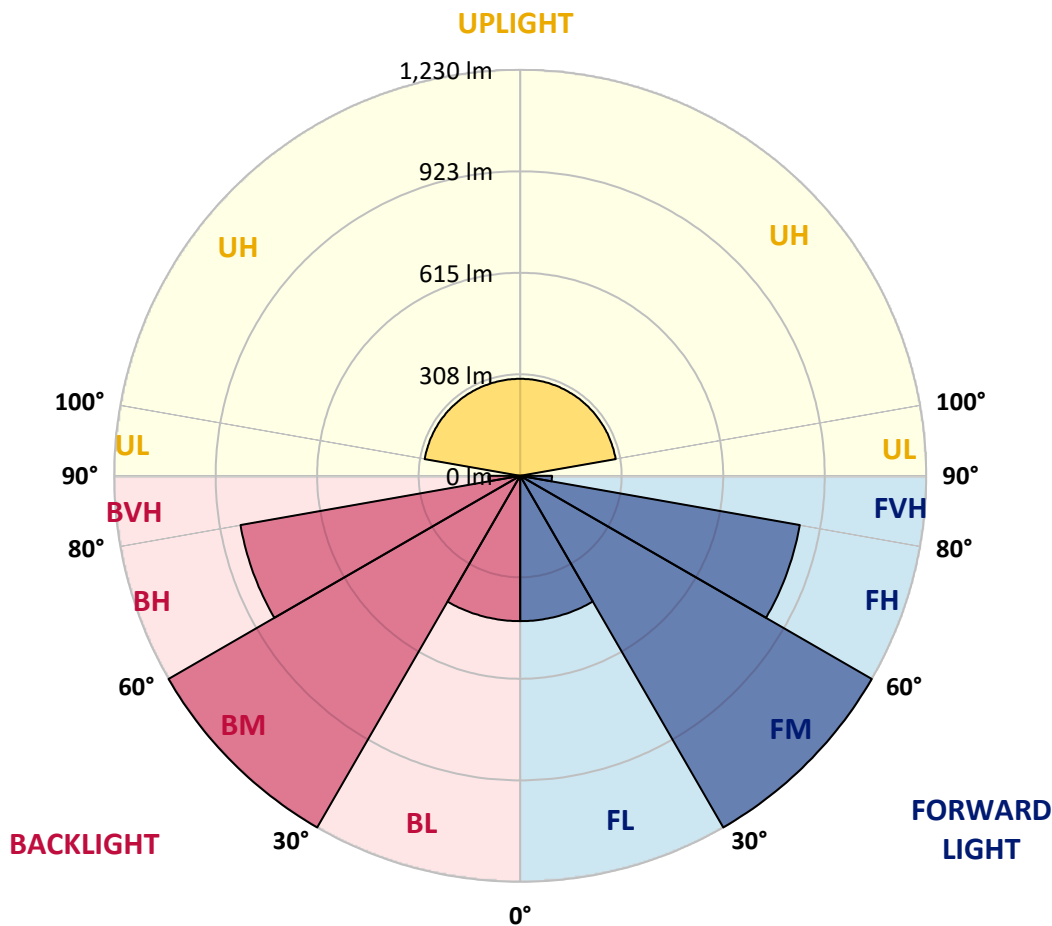


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	440.3	7.9			
FM (30°-60°)	1230.2	22.1			
FH (60°-80°)	860.4	15.5			G1/1800
FVH (80°-90°)	96.4	1.7			G1/100
BL (0°-30°)	440.3	7.9	B1/500		
BM (30°-60°)	1230.2	22.1	B2/2500		
BH (60°-80°)	860.4	15.5	B2/1000		G1/1800
BVH (80°-90°)	96.4	1.7			G1/100
UL (90°-100°)	6.7	0.1		U1/10	
UH (100°-180°)	293.8	5.3		U3/500	

BUG Rating: B2-U3-G1
 Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1105.4	1105.4	1105.4	1105.4	1105.4	1105.4	1105.4	1105.4	1105.4	1105.4	1105.4
2.5°	1101.3	1101.3	1101.3	1097.2	1101.3	1101.3	1101.3	1101.3	1101.3	1101.3	1101.3
5°	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0
7.5°	1080.7	1080.7	1080.7	1080.7	1080.7	1080.7	1080.7	1080.7	1080.7	1080.7	1080.7
10°	1064.2	1064.2	1064.2	1064.2	1068.3	1068.3	1068.3	1068.3	1064.2	1064.2	1064.2
12.5°	1051.8	1051.8	1051.8	1055.9	1055.9	1055.9	1055.9	1055.9	1055.9	1055.9	1051.8
15°	1047.7	1047.7	1047.7	1047.7	1051.8	1051.8	1051.8	1051.8	1047.7	1047.7	1047.7
17.5°	1039.4	1039.4	1039.4	1043.5	1043.5	1043.5	1043.5	1043.5	1039.4	1039.4	1039.4
20°	1031.2	1031.2	1035.3	1035.3	1039.4	1039.4	1039.4	1035.3	1035.3	1031.2	1035.3
22.5°	1031.2	1031.2	1031.2	1035.3	1035.3	1035.3	1035.3	1031.2	1031.2	1031.2	1031.2
25°	1031.2	1031.2	1035.3	1039.4	1039.4	1043.5	1039.4	1035.3	1031.2	1031.2	1031.2
27.5°	1035.3	1035.3	1039.4	1043.5	1043.5	1047.7	1043.5	1039.4	1035.3	1035.3	1035.3
30°	1035.3	1035.3	1039.4	1043.5	1043.5	1047.7	1043.5	1039.4	1035.3	1035.3	1035.3
32.5°	1027.0	1031.2	1035.3	1039.4	1043.5	1043.5	1043.5	1039.4	1035.3	1031.2	1031.2
35°	1022.9	1027.0	1031.2	1035.3	1039.4	1039.4	1039.4	1035.3	1031.2	1027.0	1027.0
37.5°	1018.8	1018.8	1027.0	1031.2	1035.3	1043.5	1039.4	1031.2	1027.0	1022.9	1022.9
40°	1014.7	1018.8	1022.9	1031.2	1035.3	1043.5	1039.4	1031.2	1022.9	1018.8	1018.8
42.5°	1014.7	1014.7	1022.9	1031.2	1039.4	1047.7	1043.5	1035.3	1022.9	1018.8	1014.7
45°	1018.8	1022.9	1035.3	1051.8	1060.0	1068.3	1064.2	1051.8	1031.2	1022.9	1018.8
47.5°	1035.3	1039.4	1051.8	1068.3	1088.9	1101.3	1088.9	1068.3	1051.8	1039.4	1035.3
50°	1043.5	1047.7	1068.3	1088.9	1117.8	1121.9	1117.8	1088.9	1068.3	1047.7	1047.7
52.5°	1060.0	1060.0	1084.8	1121.9	1146.6	1154.9	1146.6	1126.0	1084.8	1064.2	1060.0
55°	1064.2	1064.2	1093.0	1138.4	1175.5	1196.1	1175.5	1142.5	1097.2	1068.3	1068.3
57.5°	1039.4	1047.7	1084.8	1130.1	1175.5	1187.9	1175.5	1134.3	1088.9	1051.8	1047.7
60°	1010.5	1022.9	1055.9	1109.5	1142.5	1154.9	1146.6	1109.5	1060.0	1022.9	1018.8
62.5°	981.7	998.2	1035.3	1076.5	1126.0	1138.4	1126.0	1076.5	1035.3	998.2	981.7
65°	919.8	936.3	989.9	1039.4	1084.8	1093.0	1088.9	1039.4	989.9	936.3	928.0
67.5°	857.9	870.3	907.4	985.8	1022.9	1035.3	1027.0	981.7	911.5	870.3	866.2
70°	791.9	804.3	837.3	911.5	948.7	969.3	952.8	911.5	837.3	804.3	800.2
72.5°	705.3	721.8	758.9	824.9	862.0	882.7	866.2	824.9	758.9	717.7	709.4
75°	602.2	614.6	659.9	713.6	750.7	767.2	754.8	717.7	659.9	614.6	610.4
77.5°	490.8	503.2	544.5	598.1	618.7	635.2	622.8	593.9	544.5	503.2	499.1
80°	371.2	383.6	420.7	462.0	482.6	499.1	486.7	457.8	420.7	383.6	379.5
82.5°	243.4	255.7	288.7	321.7	342.3	358.8	346.5	317.6	292.8	255.7	251.6
85°	103.1	115.5	144.4	177.4	193.9	210.4	198.0	173.2	144.4	119.6	115.5
87.5°	8.2	12.4	12.4	16.5	12.4	20.6	12.4	12.4	12.4	12.4	12.4
90°	2.6	2.6	3.1	3.1	3.1	3.1	3.1	3.1	3.1	2.6	2.6
92.5°	2.6	2.6	2.6	3.6	4.1	3.6	4.1	3.1	3.1	2.6	2.6
95°	3.1	3.1	3.6	4.6	5.7	6.2	6.2	3.6	3.6	3.1	3.1
97.5°	4.1	4.6	4.6	5.7	9.3	17.0	10.3	5.1	5.1	4.6	4.1
100°	6.7	7.2	7.2	12.9	27.2	36.5	26.2	13.4	9.8	7.2	7.2
102.5°	21.6	22.6	27.8	41.6	61.7	56.0	47.3	44.7	30.8	24.7	23.6
105°	55.0	54.5	58.6	69.4	86.4	84.8	78.1	70.9	61.2	56.5	56.5
107.5°	72.5	72.5	76.1	85.3	98.2	114.6	116.2	92.0	80.7	75.6	75.0
110°	81.7	81.7	84.8	92.5	109.5	132.6	131.6	113.6	99.7	93.0	92.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	83.8	84.3	88.4	100.2	118.7	129.0	124.4	117.2	111.0	105.9	104.9
115°	86.9	86.9	91.5	102.8	113.1	117.2	112.1	106.4	102.3	100.2	101.3
117.5°	85.8	87.4	88.4	94.6	101.3	104.4	101.8	94.1	91.0	90.0	88.4
120°	79.7	79.7	80.7	83.8	87.4	88.9	87.9	82.8	80.2	79.7	78.6
122.5°	70.9	71.5	70.9	72.5	75.0	76.6	75.6	71.5	70.4	70.4	69.4
125°	62.2	62.2	61.7	62.7	64.3	63.7	64.3	62.2	61.7	61.7	61.2
127.5°	56.0	55.5	54.5	55.0	55.5	55.5	56.0	54.0	54.5	55.0	54.5
130°	49.9	49.9	48.8	48.8	48.8	47.8	48.8	47.8	48.3	48.8	49.3
132.5°	44.2	44.2	42.7	42.2	42.2	42.2	42.7	42.2	43.2	44.2	44.2
135°	39.6	39.6	38.0	38.6	38.6	38.0	38.6	38.0	39.1	39.6	39.6
137.5°	36.0	36.0	35.0	35.0	35.0	34.4	35.0	35.0	35.5	36.5	37.0
140°	32.9	32.9	32.4	32.4	31.9	32.4	32.4	32.4	32.9	33.4	33.4
142.5°	31.4	30.8	30.3	29.8	30.3	30.3	30.3	29.8	30.3	31.4	31.4
145°	28.8	28.8	28.3	28.3	28.3	28.8	28.3	28.3	28.8	28.8	29.3
147.5°	27.2	27.2	26.7	27.2	27.2	27.2	27.2	26.7	27.2	27.2	27.8
150°	26.7	26.2	25.7	26.2	26.2	25.7	25.7	25.7	25.7	26.2	26.2
152.5°	25.2	25.2	24.7	25.2	24.7	24.7	24.7	24.7	24.7	25.2	25.7
155°	24.2	24.2	23.6	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2
157.5°	23.1	23.6	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.6	23.6
160°	22.6	22.6	22.6	22.6	22.1	22.1	22.1	22.6	22.6	22.6	23.1
162.5°	22.1	22.1	22.1	22.1	21.6	21.6	21.6	21.6	22.1	22.1	22.6
165°	22.1	21.6	21.6	21.6	21.1	21.1	21.1	21.1	21.6	22.1	21.6
167.5°	21.1	21.1	21.1	21.1	21.1	20.6	20.6	21.1	21.1	21.1	21.6
170°	21.1	21.1	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	21.1
172.5°	21.1	21.1	21.1	21.1	20.6	20.6	20.6	20.6	20.6	21.1	21.1
175°	21.1	21.1	21.1	21.1	20.6	20.6	20.6	21.1	21.1	21.1	20.6
177.5°	21.1	21.1	21.1	21.1	20.6	21.1	21.1	21.1	21.1	21.1	21.1
180°	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1

(END OF REPORT)